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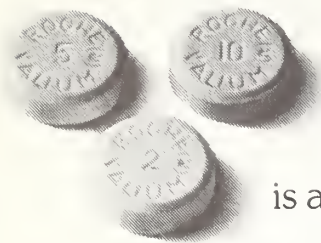
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A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium®^{IV}
diazepam/Roche
2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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Name Dropping

Probably you didn't notice, but we have dropped a name from our list of editors shown on our masthead. Dr Ernest Lachman, consistently humble, neither practiced nor approved the vain affectation of name dropping. As applied on this occasion I abhor the necessity of such indulgence. Dr Lachman is dead and, in spite of some impressions to the contrary, it is requisite that all editors of our *Journal* be living.

If you feel that such flippant humor is anathema to his memory, you didn't really know Ernest Lachman. It is exactly the kind of comment which would cause him to chuckle and slap his thighs in characteristic applause. His good humor, his brilliant wit and his polished repartee were prominent features of his remarkable personality. His life was filled

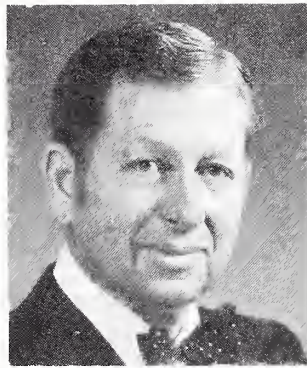
with adversity, persecution and hardship which very few — if any — of us could comprehend and to an extent which would destroy most of us. But Ernest Lachman survived, master of his own life and mentor of thousands of others. Intellectually gifted, morally disciplined, impeccably honest, he was the essence of integrity. He was a sensitive, gentle man who, even when provoked, rarely expressed anger and never abandoned his innate gentleness.

Ernest Lachman has terminated his role as an editor, but as a contributor to our *Journal* and to our lives as well, his name will never be dropped. Many of us will hurt because he can no longer be companion to our daily lives — and because he forced us to indulge in name dropping.

I hope he is chuckling and slapping his thighs. To think that he is helps dry the tears.

MRJ

Medicine is the most dynamic of the sciences. In fact, some medical scholars say much of the information we were taught eight years ago is obsolete today. The necessity to continue our education is obvious, and has been a tradition of medicine forever.



The motivation for keeping current may have been perverted. We receive admonishments from the Board of Medical Examiners, medical educators, legislative bodies and many others. Some states have passed laws requiring specific CME credits. Our own House of Delegates has made the AMA PRA award a condition of membership.

The real purpose of continuing medical education is better patient care. We should keep that fact in mind constantly. The barrage of enticements we receive daily to study in exotic places should be reviewed within the context — will it improve the quality of care I give my patients?

While there is little or no debate about the

need for CME, there is considerable debate about motivation. A recent AMA report, "Future Directions for Medical Education," is a comprehensive review of medical education both pre- and post-doctoral. Among its many concepts and principles is the following: "State medical boards should discontinue requiring mandatory continuing medical education as the major qualification for re-registering a license to practice medicine." In supporting its concept, the report states: "The mandatory nature of the requirement imposes an arbitrary requirement upon mature physicians that suppresses their own initiative to preserve their practice of medicine in modes and manners that address their needs and that are consonant with what they perceive to be the most effective methods of continuing education for themselves."

Regardless of the outcome of the how to motivate debate, we should insist that the quality of our CME courses be consistent with our basic objective — Quality Patient Care.

Wm. M. Leeborn, M.D.

Outpatient Needle-Biopsy of the Prostate: A Retrospective Study

PHILIP MOSCA, PhD, MD
JOHNNY B. ROY, MD

The results of 210 consecutive needle-biopsies of the prostate, done in an outpatient clinic, are reviewed. The accuracy, obtained by matching needle-biopsy results with results of studies performed following subsequent prostatectomy, was 95.2%. The total number of positive biopsies was 12%.

INTRODUCTION

There are approximately 17,000 deaths each year from carcinoma of the prostate. The conspicuous absence of symptoms of early prostatic lesions is a well known entity, as well as the fact that most early lesions are not detectable on digital rectal examination.^{1, 2}

The incidence of occult carcinoma in both autopsy specimens and material from routine prostatectomy has been well reviewed.^{1, 3, 4} The use of various biopsy techniques to uncover oc-

cult or early carcinoma of the prostate has been under discussion for many years.⁵⁻⁹ In this regard the diagnostic accuracy of specific biopsy techniques is of utmost importance. Needle-biopsy of the prostate by the transperineal or transrectal route has generally been accepted as a simple, safe and accurate procedure.

Herein, we report our experience with 210 consecutive needle-biopsies of the prostate done in our outpatient urology clinic, over a 14-month period.

MATERIALS AND METHODS

The outpatient clinic records of 210 consecutive needle-biopsies of the prostate done at our VA Hospital were reviewed. All biopsies were done by resident physicians. All patients were admitted to the hospital and observed for 24 hours after biopsy and received post-biopsy antibiotics. All biopsies were done under local anesthesia, and most with supplemental pre-biopsy diazepam administration. The disposable "Tru-cut" or a Silverman biopsy needle was used in most cases. Transrectal biopsy was performed in over 90% of the cases. The remainder of the patients underwent transperineal biopsy. The analysis of infection and hematuria was from the last 50 patients in the series. In analyzing the infection rate, those

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patients who developed fever of 38.5° C or higher during their hospitalization were considered positive. Hematuria was considered a complication if it was of a degree sufficient to warrant urethral catheterization for control, or to relieve acute retention.

Patients were divided into two groups. Group 1 consisted of men under 70-years-of-age with obstructive voiding symptoms scheduled for elective prostatectomy, and those patients with suspicious prostatic lesions. Group 2 consisted of those patients with clinically suspected stage D disease who were undergoing biopsy for a definitive tissue diagnosis.

The accuracy in group 1 was assessed by matching biopsy results with pathology report findings from subsequent prostatectomy. The patients with positive biopsy results or positive results on subsequent prostatectomy were then analyzed according to clinical stage versus ultimate pathologic staging and tumor grading. Results of bone scan, acid and alkaline phosphatase determinations, chest x-ray findings and findings on IVP were also surveyed when available.

The commonly accepted clinical and pathologic staging of prostatic cancer into four major categories was employed.

Stage A — clinically inapparent prostatic cancer found incidentally during examination of surgically removed tissue.

Philip Mosca, PhD, MD, received his degrees from the University of Oklahoma and the University of Oklahoma College of Medicine, where he is presently chief resident in urology. Dr Mosca is a candidate of the American College of Surgeons.

A graduate of the Baghdad University College of Medicine, Johnny B. Roy, MD, has been certified by the American Board of Urology. He is assistant professor of urology at the University of Oklahoma Health Sciences Center. Dr Roy is president-elect of the Oklahoma State Urological Association and president of the Kidney Foundation of Oklahoma. He is a member of the American College of Surgeons, the International College of Surgeons, the Society of University Urologists, and the American Urological Association.

Stage B₁ — A discrete nodule less than 0.2 cm in diameter confined to one area of the prostate.

Stage B₂ — A firm prostate gland associated with a nodule or with evidence of greater than 25% of the gland involved on pathologic examination. No evidence of extracapsular or seminal vesicular involvement on digital examination.

Stage C — Clinically evident lesion with apparent local extension beyond the capsule or into the seminal vesicles.

Stage D — Clinically metastatic disease evident.

The tumors were separated according to the following histologic grading.

Grade 1—Well-differentiated.

Grade 2—Moderately well-differentiated.

Grade 3—Poorly-differentiated.

Grade 4—Anaplastic

Grade 5—Unspecified.

RESULTS

The age range of patients undergoing biopsy was from 44-87 years with a mean age of 59.4 years. The mean age of patients returning a positive biopsy or subsequent positive pathologic diagnosis on prostatectomy was 65.8.

Of the 210 needle-biopsies, one biopsy specimen provided insufficient tissue and was not rebiopsied. Of the remaining 209 patients, 83 underwent subsequent prostatectomy for benign disease. From the results of the final pathologic reports four of these 83 patients (4.8%) ultimately had the diagnosis of carcinoma of the prostate; these patients were then classified as clinical stage A. The accuracy of needle biopsy was, therefore, calculated at 95.2%.

The positive return of carcinoma of the prostate of needle biopsy in group 1 was 7%. The total number of positive biopsies in the study group (group 1 and group 2) was 25/209 for 12%. The various parameters of all patients in the study group with the diagnosis of carcinoma of the prostate are tabulated in Table 1.

The mean age of patients with carcinoma was 65.8 years.

Of the patients who were staged clinically as Stage B who underwent radical prostatovesiculectomy, 80% remained in Stage B for their final pathologic classification. Of the positive biopsies 51.7% returned a pathologic grade of well-differentiated carcinoma. All pa-

TABLE 1

AGE	RACE	NAME	CLINICAL STAGE	PATHO LOGICAL STAGE	IVP	BONE SCAN	ACID PHOS PHA TASE	ALKALINE PHOS PHA TASE	CXR	BIOPSY ROUTE	SURGERY	HORMONAL TREATMENT	PATHOLO GICAL GRADE
55	W	R.S.	A	A	N	N	N	N	N	1 ^A	RRP-with N	—	1
70	W	P.L.	A	B ₂	N	N	N	N	N	1 ^A	RPP	—	1
60	W	F.B.M.	A	B ₂	N	N	N	N	N	1 ^A ;2	R-P	Rad. Ther	1
59	W	C.S.	A	A	N	N	N	N	N	1 ^B	TUR X2	—	1
65	B	N.L.	B ₁	Ref	Ref	—	N	N	N	1 ^A	Ref	—	1
58	W	B.N.	B ₂	Transferred chart — lost to follow-up									
70	B	R.F.	B ₂	Ref	N	N	+	N	N	1 ^A	Ref	—	1
56	I	J.J.	B ²	C	N	N	N	N	N	1 ^A	RPP	—	3
63	W	A.B.	B ₁	B ₂	N	N	N	N	N	1 ^A	RPP	—	1
66	W	T.F.	B ₂	B ₂	N	N	N	N	N	1 ^A	RPP	—	1
60	W	D.D.	B ₁	B ₁	N	N	N	N	N	1 ^A	RRP	—	2
60	W	C.N.	B ₁	B ₂	N	N	N	N	N	1 ^A	RPP	—	2
73	W	H.G.	B ₁	B ₂	N	N	N	N	N	1 ^A	RPP	—	1
71	B	T.V.	B ₂	B ₂	N	N	N	N	N	1 ^A	RPP	—	1
65	W	W.O.	B ₂	D	N	N	N	+	N	1 ^A	RPP-with N	—	1
64	M	M.M.	B ₁	B ₂	N	N	N	N	N	1 ^A	RPP	—	2
55	W	C.S.	B ₂	B ₂	N	N	N	N	N	1 ^A	RRP	—	2
81	B	O.M.	C	C	N	N	N	N	N	1 ^A	—	yes	1
52	B	H.H.	D	D	+	—	N	+	Meta. 1 ^A bone	—	—	yes	2
64	B	E.R.	D	D	—	+	+	+	+	1 ^A	—	yes	1
78	W	O.F.	D	D	—	+	N	N	N	1 ^A	—	yes	1
68	B	E.D.	D	D	+	+	—	+	+	—	Bil.Orch.	yes	5
78	W	J.C.	D	D	N	+	N	N	N	1 ^A	TUR-P	yes	2
64	W	J.P.	D	D	+	+	+	+	N	1 ^A	Bil.Orch.	yes	2
					non vis. R.Kid.								
87	W	C.P.	D	D	+	—	N	N	N	1 ^A	TUR-P	yes	3
54	W	W.M.	D	D	+	+	—	—	N	1 ^A	Bil.Orch.	yes	3
82	B	J.B.	D	D	Transferred — lost to follow-up								
61	B	J.G.	D	D	+	+	+	—	+	1 ^A	TUR-P	yes	2
70	W	C.E.	D	D	—	+	N	N	N	1 ^A	—	yes	1

Explanation of Terms:

Columns 1, 2, 3, — Self explanatory.

Columns 4, 5 — See Text.

Columns 6 - 10 - N = Normal; + = metastases evident; ref - refused;
— = not done; + = elevated.Column 11 - 1^A - Transrectal; 1^B - Transperineal; 2 - Transurethral; 3 - Open

Column 12 - TUR-P - Transurethral resection of prostate

RP - Retropubic prostatectomy

RRP - Radical retropubic prostatectomy

RPP - Radical perineal prostatectomy

With N - With pelvis lymphadenectomy

Bil.Orch. - Bilateral Orchiectomy

Column 13 - Rad Ther - Radiation Therapy.

Column 14 - See Text.

tients with an elevated alkaline phosphatase had Stage D disease and 50% of these had higher grade tumors.

The total complication rate was 12%, with hematuria accounting for 4% and 8% representing post-biopsy temperature elevation.

DISCUSSIONS

Patient selection is one of the most variable and integral factors in any study of this kind. The patient population in this study is a highly-selected group for a number of reasons. First, patients with suspected carcinoma of the prostate on rectal examination are seen frequently as inpatient consultations. The biopsies of these patients may or may not be done in the outpatient clinic area. If these cases were not biopsied in the clinic, they were excluded from the study group. Secondly, not all patients in group 1 underwent subsequent prostatectomy. Those with suspect glands and negative biopsies who did not have voiding symptoms are being followed in the outpatient clinic. Hence some additional cases of occult carcinoma may have been missed. The method of biopsy must also be considered. Our technique has previously been reported to have an accuracy of between 81-93%.⁶⁻⁸ One must appreciate that a negative biopsy does not rule out the presence of carcinoma since approximately 15% of prostatic cancers are said to arise in the anterior aspect of the gland.¹⁰

In our study the latent carcinoma incidence

was 4.8% which compares favorably with previously reported series using standard and not "step-section" pathologic techniques.² The incidence of carcinoma *per se* in our outpatient population was 12% which again compares favorably to the 12-17% figure reported in earlier studies.^{1, 9}

Our complication rate is somewhat lower than other reported studies and may reflect in part a different patient selection criterion.

We feel that this study shows the outpatient needle-biopsy procedure under local anesthesia used in our hospital affords a safe, simple, and accurate way to establish the diagnosis of prostatic cancer.

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Metabolic Acidosis Associated With Percutaneous Absorption of Salicylic Acid

WILLIAM O. SMITH, MD
DANIEL LYONS, MD

A case is reported to illustrate the occurrence of salicylate intoxication due to percutaneous absorption of salicylic acid.

The potential toxicity from the administration of many therapeutic agents in patients with compromised renal function has been repeatedly emphasized in recent years. We report a patient recovering from acute renal failure who developed metabolic acidosis associated with cutaneous application of an ointment containing salicylic acid.

REPORT OF A CASE

A 72-year-old white male presented to the Oklahoma City Veterans Administration Medical Center on 10/31/78 in acute renal failure after having received a ten-day course of gentamicin for an *E. Coli* pneumonitis following an open reduction of a left femoral neck fracture. The patient's past medical history was not significant other than for a vague history of penicillin allergy.

Initial physical examination revealed an obtunded white male with a blood pressure of 130/70 mm Hg, pulse 40/min, respirations 24/min, and temperature 37°C. Funduscopy examination revealed AV nicking and arteriolar narrowing. The lungs were clear to auscultation. Cardiac examination was normal with no pericardial friction rub. Examination of the abdomen revealed no abnormalities and there were no focal abnormalities on neurological examination. There was 2+ pitting pretibial edema. The initial electrocardiogram showed an accelerated idioventricular rhythm with a broad QRS and tall T-waves in a sine wave configuration. Chest X-ray revealed a possible left lingular infiltrate and cardiomegaly. Laboratory studies showed 7700 WBC/cu ml with a hemoglobin and hematocrit of 9.3 gm% and 30 mm respectively. Serum electrolytes were as follows: sodium 119 mEq/l, potassium 8.8 mEq/l, chloride 94 mEq/l, CO₂ 14 mEq/l, BUN greater than 100 mg%, creatinine 8.3 mg% and glucose 120 mg%. Arterial blood gases on six liters of oxygen/min revealed a pH of 7.25, PaO₂ 90 mm Hg and CO₂ 30 mm Hg. The patient was admitted to the Medical Intensive Care Unit where he underwent 36 passes of peritoneal dialysis. Upon completion of dialysis, the potassium had decreased to 3.4 mEq/l, the BUN to 57 mg%, the creatinine to 6.3 mg% and the CO₂ content was 25 mEq/l. Although initially oliguric, the patient's urine output gradually increased to acceptable levels.

After transfer to the general medical ward, the patient continued to have an adequate uri-

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nary output with progressive improvement in the azotemia. A progressive anemia consistent with chronic inflammation and/or uremia was noted, as well as a urinary tract infection which was treated with ampicillin. By 11/21/78 the patient had begun to develop a desquamating maculopapular, mildly puritic rash over the trunk and extremities which was felt to represent a drug allergy to the ampicillin. The ampicillin was subsequently discontinued and the patient received erythromycin for a total of seven days. By 11/27/78 the skin lesions had progressed to an ichthyiform exfoliation of the face, trunk, and extremities. Burrows-solution (1:80) wraps were applied to the ichthyiform areas (two hours on and one hour off) with 0.025% triamcinilone in 5% salicylic acid and eucerin applied in the interim.

On 12/4/78 the CO₂ content had decreased to 10 mEq/l with a serum sodium of 141 mEq/l, potassium 4.9 mEq/l, and chloride 114 mEq/l. Arterial blood gases revealed a pH of 7.39, PaO₂ 89 mm Hg, PaCO₂ 18 mm Hg and the serum HCO₃ was 9.9 mEq/l. A serum lactate was 29 mEq/l and the blood salicylate level was 14 mg%. The urinary pH was 5.0. Sodium citrate solution was administered and the salicylic acid soaks were discontinued. By 12/6/78 the CO₂ content had risen to 12 mEq/l and to 20 mEq/l by 12/11/78.

Thereafter the patient did well with resolution of the acidosis and improvement in his skin condition. By the time of discharge on 12/28/78 the serum electrolytes were normal.

DISCUSSION

An appreciable number of cases of salicylate

intoxication from percutaneous absorption have been reported in the literature,¹⁻⁴ the majority in European journals. A significant number of deaths have occurred in this group.

In most of the patients the blood salicylate levels were substantially higher than in our patient. However, salicylate intoxication has been reported with blood levels below 15 mg%^{2, 5} and deaths have occurred in patients with blood levels no higher than 15 mg%.⁶ Furthermore, the correlation of clinical manifestations of salicylate intoxication with blood salicylate levels is variable. Other factors may have been involved in the metabolic acidosis of our patient but it seems likely that the salicylate was an important component. The acidosis improved markedly when the salicylic acid ointment was discontinued.

Although salicylic acid is absorbed through normal skin¹ the absorption is enhanced when the epidermal barrier is defective, as in psoriasis or extensive atopic dermatitis.² Our patient certainly suffered widespread epidermal destruction and the ointment was applied to a large portion of his integument. In addition, the vehicle was a hydrated hydrophilic petrolatum ointment. Stolar et al⁷ demonstrated that this ointment base allows a particularly rapid penetration of the salicylic acid through the skin.

Until recently it was believed that metabolic acidosis with salicylate intoxication in adults was unusual. However, recent studies do not support this contention; 78% of the adult patients reported by Gabow et al⁸ manifested metabolic acidosis.

A discussion of the mechanisms involved in the acid-base disturbances in salicylate intoxication is beyond the scope of the present communication.

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Alcoholic Thrombocytopenia

A Brief Review

JUDITH H. WILSON, MD

ASSISTED BY DAVID J. KARASEK, MD

When your chronic alcoholic patient develops or presents with thrombocytopenia, there are several factors of which to be aware; some reversible with true and/or replacement therapy and others are not reversible.

Thrombocytopenia (platelet count less than 150,000/cu mm) associated with chronic alcoholism has been shown to occur frequently.^{1-6, 21} There appear to be three major causes for the thrombocytopenia:¹⁹

Folic acid deficiency

Hypersplenism associated with alcoholic cirrhosis

Direct toxic effect of alcohol on platelet production, function and survival, the exact mechanism(s) of which is unknown

Other factors such as hyperosmolality,⁵ may contribute to the thrombocytopenia.

FOLATE

Sullivan and Herbert¹ showed that folate de-

Submitted for publication February, 1979.

fiency was associated with thrombocytopenia in chronic alcoholics. They placed one patient with a megaloblastic bone marrow on a diet containing less than five micrograms of folate (minimum daily requirement is 50 micrograms) and 32 ounces of muscatel wine daily. Baseline platelet count was 26,000/cu mm. After a period of stabilization, a folate supplement (150 micrograms daily) was added to the regimen. The platelet count rose to 192,000/cu mm with folate repletion although the megaloblastic bone marrow persisted as long as alcohol consumption continued. They felt that the platelet suppressive effect of alcohol was in part related to folate deficiency and postulated an additional direct toxic effect on the bone marrow.

SPLEEN

Hypersplenism with splenic pooling of platelets in patients with alcoholic cirrhosis is a second cause of thrombocytopenia.⁷ Peripheral platelets are separated into a circulating functional pool (two-thirds of total platelets) and a splenic storage pool (one-third). The spleen regulates platelet distribution and splenic enlargement can cause a shift of the circulating platelets into the spleen. The bone marrow, however, may not respond to the low circulating platelet pool, presumably because the release of thrombopoietin (a humoral

Thrombocytopenia / WILSON

factor thought to be the signal for platelet production) may be dependent on the *total mass* of peripheral platelets rather than just the circulating pool.

DIRECT TOXIC EFFECT

What of the thrombocytopenia seen in alcoholics who are neither folate deficient nor have hypersplenism secondary to cirrhosis? In the past decade, many authors have demonstrated that alcohol appears to have a direct toxic effect on platelet production, structure, function and survival.

Lindenbaum and Hargrove,³ from New York Bellevue Hospital, reported ten instances of thrombocytopenia in five hospitalized chronic alcoholics suffering with delirium tremens. None had splenomegaly, cirrhosis or folic acid deficiency. Average daily intake of alcohol was one-to-two pints of whiskey. Platelet counts ranged from 45,000/cu mm to 115,000/cu mm on admission. Bone marrow aspirates done within twenty-four hours of admission did not have megaloblastic changes. Patients were treated with alcohol withdrawal, intravenous fluids and vitamins (excluding folate and B 12). Platelet counts rose rapidly, returning to normal three-to-seven days after admission. A rebound thrombocytosis occurred at ten-to-nineteen days (500,000/cu mm to 914,000/cu mm) followed by a return of the platelet count to normal range. They concluded that the depressed platelet count seen in these patients was secondary to some direct toxic effect of alcohol on the platelets, the exact nature of which was unknown. Supporting this belief was the rapid rise in platelet counts and the rebound thrombocytosis following cessation of alcohol. Their conclusion was strengthened when thrombocytopenia recurred in three-fifths of the patients readmitted for alcohol withdrawal eight weeks after discharge.

To determine the incidence of thrombocytopenia in chronic alcoholics without stigmata of cirrhosis, anemia or infection, they surveyed chronic alcoholics admitted to the hospital over a two-month period. They found that thrombocytopenia in this group occurred with an incidence of 14 per cent.

That same year (1968) Post and Desforbes,² at Boston City Hospital, also postulated a direct toxic effect of alcohol on platelets. They

studied eight alcoholic patients with twenty episodes of acute thrombocytopenic purpura following alcohol ingestion. On admission, platelet counts were less than 50,000/cu mm and all had purpura and hepatomegaly, but only three had palpable spleens. Bone marrow aspirates obtained within twenty-four hours of admission showed no megaloblastic changes. Corticosteroids were given to four patients, but their platelet recovery rate did not differ from those not treated with steroids. No patient had any bleeding sequela other than purpura during their hospital stay. Platelet counts returned to normal with cessation of alcohol ingestion in five-to-twenty days as reported previously.³ They suggested that the thrombocytopenia resulted from temporary platelet sequestration rather than destruction. But isotopic scanning of the liver and spleen failed to demonstrate increased radioactivity during the period of low platelet counts and the site of sequestration remains unknown.

Ryback and Desforbes,⁶ in their study of three known alcoholic volunteers, lent support to the initial platelet sequestration explanation. They also suggested that a later gradual development of thrombocytopenia observed was secondary either to increased platelet destruction or bone marrow depression. They administered alcohol (43 per cent ethanol, caramel, propylene glycol and "essential oils") to three alcoholic patients for twelve days and found a transient initial drop (from normal) in the platelet counts within five hours after ingestion. The counts returned to normal by the second day. However, thrombocytopenia gradually developed over the following week during continued ingestion of the alcoholic beverage. Platelet counts then returned to normal as in previous studies after alcohol intake was stopped.

Judith H. Wilson, MD, was graduated from the University of Oklahoma College of Medicine in 1977, where she is presently a resident in internal medicine.

A 1975 graduate of the University of Oklahoma College of Medicine, David J. Karasek, MD, is now Assistant Professor in the Department of Internal Medicine at his school of graduation.

Sullivan *et al*⁸ noted a drop in megakaryocytes associated with a fall in platelet count in folate-replete alcoholics fed alcohol. They concluded that alcohol impaired megakaryocytopoiesis. To determine the extent of this impairment,⁹ they hospitalized two otherwise healthy alcoholics and induced thrombocytopenia by thrombocytapheresis, dropping their platelet count from 365,000/cu mm to 192,000/cu mm and from 275,000/cu mm to 78,000/cu mm for their controls. They then followed platelet counts and bone marrow changes finding that recovery of platelet count was associated with an increase in young megakaryocytes appearing at twenty-four to twenty-eight hours. Recurrent thrombocytopenia was induced as before, but it was done two days after beginning ethanol ingestion. As ethanol intake continued, platelet counts and bone marrow changes were again observed. They found a delay in the increase of young megakaryocytes, compared with that observed during the control period. They also noted that even when the megakaryocyte number had returned to normal, the thrombocytopenia persisted as long as alcohol ingestion continued. They concluded that alcohol impairs both the differentiation of precursor cells into recognizable megakaryocytes and the production of platelets by more mature megakaryocytes.

Sahud,¹⁰ in studying six alcoholic patients recovering from alcohol-induced thrombocytopenia, found an increase in platelet size and megathrombocyte number as platelet counts returned to normal. Megathrombocyte percentage has been shown to reflect bone marrow megakaryocyte numbers in normals and in several thrombocytopenic states.¹¹ Sahud felt this supported the role of alcohol in suppressing platelet production and demonstrated recovery of the bone marrow following abstinence.

Some authors^{5, 12} have noted that *ineffective thrombopoiesis*, similar to that seen in folate-deficient patients, occurs in patients drinking ethanol and developing thrombocytopenia, who are not folate-deficient. Cowan,⁵ noted an increased megakaryocyte mass in the bone marrow (contrary to Sullivan) but, a decreased rate of platelet production *ie*, the bone marrow did not respond appropriately to the thrombocytopenia. Cowan also measured the *total megakaryocyte mass* (total platelet production

capacity of the bone marrow) and *platelet turnover* (actual delivery of platelets to the blood). They found an increased megakaryocyte mass associated with a decreased platelet turnover compatible with ineffective thrombopoiesis, although, the degree of which was greater in folate-deficient patients.

SURVIVAL

Normal platelet life-span is eight-to-ten days. Sullivan and Herbert,¹ first noted that the Chromium⁵¹-labeled autologous platelet survival in one patient was shortened during muscatel wine ingestion. Post and Desforges² also found decreased platelet survival (five days) in one patient admitted with post-alcoholic delirium tremens, thrombocytopenia and purpura. Cowan,^{5, 12} studied platelet survival in eight alcoholics admitted for acute intoxication. As before, none of these had evidence of cirrhosis, infection, bleeding or splenomegaly. He also found a decreased survival of autologous platelets (3.8 days) in folate-supplemented patients who developed thrombocytopenia while ingesting alcohol.

A. Extracellular

In an effort to elucidate whether the reduced platelet life-span was due to an intracellular defect or some circulatory extracellular factor, *eg* ethanol or metabolite. Cowan measured several factors. One patient, while thrombocytopenic and ingesting alcohol, received normal homologous labeled platelets; homologous platelet survival was intermediate (75 percent of control), between control (abstinence) and autologous labeled platelet survival during alcohol ingestion. They felt this gave support to involvement of extracellular factors, *ie* probably ethanol *per se*.

Ethanol was found to inhibit platelet function *in vitro*⁵ by impairing the rate of nucleotide and ¹⁴C-serotonin release.

No evidence was found for the existence of anti-platelet antibodies or ethanol-induced fibrinolysis.

B. Intracellular

Intracellular platelet abnormalities were also found associated with thrombocytopenia and alcohol ingestion. Primary and secondary platelet aggregation, platelet factor three availability and the release of adenine nucleotides (all being measures of platelet function) were impaired.^{5, 12}

Platelets can be separated into two popula-

tions: large heavy platelets with more protein are younger; while small lighter ones are older.¹³ Cowan¹² found that the protein content of platelets during alcohol ingestion and thrombocytopenia was greater than that during abstinence. He concluded that the shorter life-span observed was secondary to destruction of newly-formed platelets.

OTHER MECHANISMS

Cowan cited several other possible mechanisms that may contribute to the direct toxic effect of alcohol on the platelets.

Osmolality

Robinson and Loeb¹⁴ found that the ingestion of ethanol sufficient to produce even mild inebriation results in marked elevation of plasma osmolality. Cowan *et al*¹⁵ noted that elevated plasma osmolality produced by sodium chloride, choline chloride, sorbitol and urea all resulted in impaired platelet aggregation. They hypothesized that the hyperosmolality seen with ethanol ingestion may contribute to the platelet dysfunction.

Increased Cyclic AMP

Cowan⁵ also noted increased cyclic AMP levels of platelets in patients ingesting alcohol. Increased platelet cyclic AMP has been associated with platelet aggregation inhibition.²⁰ The contribution of this to the platelet dysfunction seen in alcoholic thrombocytopenia is unknown.

SIGNIFICANCE

When one encounters thrombocytopenia in an alcoholic patient, what clinical considerations should obtain?

Folate deficiency should be ruled out and corrected if present.

Splenomegaly, secondary to alcoholic cirrhosis, may be the culprit and the thrombocytopenia therefore, chronic. But, if the thrombocytopenia is secondary to a direct toxic effect of ethanol, one expects to see a rapid recovery in platelet count beginning three-to-twelve days after abstinence from alcohol. The platelet count often increases irrespective of

MECHANISMS OF THROMBOCYTOPENIA IN CHRONIC ALCOHOLICS

TABLE I

Folate Deficiency
Hypersplenism — associated with alcoholic cirrhosis
Direct Toxic Effect—exact mechanism unknown
a. Platelet sequestration—debatable
b. Decreased Production of Platelets—ineffective thrombopoiesis
c. Decreased platelet survival
d. Altered function
Others
a. Hyperosmolality
b. Increased Cyclic AMP

the initial count, rising from 20,000/cu mm to 60,000/cu mm platelets per day.¹

A rebound thrombocytosis may occur which rapidly resolves. Rebound thrombocytosis (500,000/cu mm to 900,000/cu mm) following cessation of alcohol ingestion is a transient and frequent phenomenon occurring ten-to-fifteen days after cessation of alcohol ingestion as the platelet count is recovering. Recently, Haselager and Vreeken¹⁶ suggested that this may be a factor in unexplained recurrent venous thrombosis and pulmonary emboli seen in some alcoholic patients.

In a follow-up letter, Currie and Kaegi¹⁷ demonstrated spontaneous platelet aggregation in a chronic alcoholic (with rebound thrombocytosis) which was not present when the platelet count was normal. It is generally felt, though, that the rebound thrombocytosis observed is relatively harmless, although its exact pathogenic importance is unknown.^{22, 16}

The thrombocytopenia observed in alcoholics is rarely associated with life-threatening or even serious bleeding, in contrast to other thrombocytopenic disorders (*eg* idiopathic thrombocytopenic purpura). Cowan and Hines,¹ in their study of forty-three severely alcoholic patients, 81 percent of whom were thrombocytopenic (24,000/cu mm to 145,000/cu mm), found that none had purpura or petechiae. Clotting studies and assays for factors V and VIII were normal and none experienced bleeding abnormalities.

Thrombocytopenia thought to be secondary to a direct toxic effect of ethanol is seen frequently in heavy, chronic drinkers and rarely in other "lighter" drinkers. In the Cowan and Hines study,¹ 82 percent of their patients were thrombocytopenic and the average consumption was a fifth or more of 86-proof whiskey

daily either for periods greater than three months or during short binges. Myrhed, *et al*,¹⁸ studied thirty-four non-cirrhotic male alcoholics after drinking bouts, the majority of whom held jobs and were "socially well-adapted." They found no significant differences in the *mean* platelet count either on admission (230,000/cu mm) or after one week. Of interest, though, five of twenty-six patients in their study did have thrombocytopenia (70,000/cu mm to 117,000/cu mm) on admission — which quickly normalized.

SUMMARY

It appears there are three major mechanisms associated with thrombocytopenia seen in chronic alcoholics. One is corrected with dietary supplement of folate; the second, a direct toxic effect, is corrected by abstinence from alcohol and the third, hypersplenism, is chronic.

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<p>Ovarian Carcinoma Symposium offers Oklahoma area physicians a rare opportunity to hear the latest clinical approaches to this controversial medical problem from three internationally recognized physicians including Dr. Robert Young, the chief of medicine at the National Cancer Institute.</p>	<p>This program is approved for 5 1/2 hours of AMA Category 1 credit and is sponsored by the Natalie Warren Bryant Cancer Center.</p> <p>For more information call the Office of Continuing Medical Education, Saint Francis Hospital: 918-494-1454.</p>

In August 1978, a nursing home patient was admitted to a hospital where a diagnosis of tuberculosis was made. The county health department staff then did a contact evaluation of the nursing home and six additional cases were identified and started on treatment. Over 75 other patients had positive skin tests and were recommended for preventive treatment. There were 40 cases of tuberculosis identified in nursing homes during 1978 and there had been 23 more in the first ten months of 1979.

Because the number of cases found in nursing homes represented 11.5% of all new cases in 1978, it has been proposed that in addition to the required examination of nursing home employees annually, that patients should be skin tested and their tuberculosis status identified.

The Oklahoma State Department of Health working with the county health departments and the Oklahoma Nursing Home Association are undertaking to establish this status. To accomplish this they are contacting the Medical Community in each county and presenting the proposed program. Basically the program proposes that each nursing home patient and employee, if not known to have a positive test, be skin tested using PPD-T intermediate



News From The Oklahoma State Department of Health

strength and mantoux method. If the skin test is negative, it is to be repeated in two weeks to check for possible "booster" effect. All patients with positive skin tests who have not had a chest x-ray in the past 12 months will then be x-rayed. The x-ray services will be provided with portable x-ray equipment and will be done in the nursing home. All recommendations will be forwarded to the county health department and the physician of these individuals.

The program is a service to the nursing homes in an effort to reduce future tuberculosis outbreaks and to establish a base line for identifying converters should future cases be identified. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR OCTOBER 1979

DISEASE	OCTOBER	OCTOBER	SEPTEMBER	TOTAL TO DATE	
	1979	1978	1979	1979	1978
Amebiasis	1	2	6	17	27
Aseptic Meningitis	11	14	24	103	64
Brucellosis	—	1	—	2	5
Encephalitis, Infectious	2	2	—	20	19
Gonorrhea (Use Form ODH-228)	1412	1191	1305	11635	11444
Hepatitis A	23	32	37	217	291
Hepatitis B	24	15	21	127	130
Hepatitis Unspecified	26	16	22	170	167
Measles (Rubeola)	—	1	—	22	14
Meningococcal Infections	4	—	3	30	15
Pertussis	18	—	—	25	12
Rabies (animal)	22	11	24	243	164
Rocky Mountain Spotted Fever	8	3	8	59	54
Rubella	1	1	—	23	13
Rubella (congenital)	—	—	—	—	—
Salmonellosis	67	51	68	340	266
Shigellosis	38	45	34	216	290
Syphilis (Use Form ODH-228)	9	10	7	84	96
Tetanus	—	—	—	—	3
Tuberculosis	37	20	35	311	279
Tularemia	1	1	2	14	5
Typhoid Fever	—	1	—	—	3

OSMA Forms Insurance Company

A physician-owned professional liability insurance company was approved by the Board of Trustees of the Oklahoma State Medical Association at their quarterly meeting held in November.

Board members spent a major portion of the meeting in discussion about the insurance company which became operational in December and began issuing policies effective January 1, 1980.

The new company will be capitalized over a three-year period at a level of \$3 million. Capitalization fees will be paid by the participating physicians in addition to the premium for professional liability coverage. In 1980 Oklahoma doctors will pay to capitalize the new company and buy malpractice insurance for a rate of less than what the commercial market demanded for insurance alone.

Many commercial insurance companies dropped malpractice insurance for physicians in the mid-1970's following a number of large court settlements and a tremendous increase in the number of claims. Although Oklahoma's claims experience has remained much better than most other states, the national professional liability crisis began to affect the Oklahoma program adversely in 1975. Since that time Oklahoma doctors have had to pay large premium increases each year to commercial companies which have had the OSMA account. Since 1974 the rates paid by Oklahoma physicians have increased over 200 percent.

Because of the unstable insurance market the state medical association began studying the possibility of forming an insurance company two years ago. In 1979, rate increases to Oklahoma physicians equaled 32.6 percent, amounting to an additional \$2.4 million in premiums. It was then that OSMA became serious about forming its own company.

This fall OSMA accepted insurance bids from two commercial companies in addition to the proposal to self-insure. After reviewing the commercial bids and the cost of self-insuring, OSMA's insurance committee unanimously recommended forming a physician-owned company.

In addition to the captive insurance company, the board approved reports by all other OSMA councils. They also approved financing some of the expenses for a selected student delegate to attend the AMA national convention held in Hawaii in December. □

New Directors Head OHSA

An executive director and assistant executive director were appointed in November to head the Oklahoma Health Systems Agency.

Howard Vincent was selected as the agency's director and Hershel Lamirand was named assistant director.

The Health Systems Agency is one of several entities created by The National Health Planning Resources Act of 1976 which was endorsed to help improve health planning and development activities. HSA's primary purpose according to the act includes reviewing certificates of need from hospitals and medical clinics.



Howard Vincent

"The real challenge ahead is to bring harmony into the health planning movement and mobilize health resources in Oklahoma," Vincent said after his appointment.

Vincent has served as acting director since the resignation of Larry DePriest in June. Vincent's experience in health includes working at local, regional, state and national levels of government. He received his Masters Degree in Science and Public Health from the University of Oklahoma in 1966.



Hershel Lamirand

Lamirand has served as HSA director of development since September, 1977. He is also the current chairman for the Regional Task Force on Implementation of Health Plans, and a member of the Oklahoma Health Education Advisory Council, the Oklahoma Public Health Association, and the American Health Planning Association.

Ophthalmologist Discusses Potential Alternative For Visual Correction

A "living lens" for patients who have had cataracts removed was described as a potential alternative for visual correction at the first annual meeting of the American Academy of Ophthalmology conducted in November.

Ophthalmologist Herbert E. Kaufman, MD, opened this seminar with a presentation outlining new surgical procedures using a living lens for aphakics, people who have had their natural lenses removed because of eye-clouding cataracts. Doctor Kaufman is chairman of the Department of Ophthalmology at Louisiana State University and director of the LSU Eye Center.

"If this living lens can provide the kind of long-term correction we anticipate," he said, "it may open the door to the safest and easiest approach to the correction of aphakia."

Doctor Kaufman credited José Barroquer, MD, Colombia, as one of the originators of the living lens concept. The guest lecturer said the Colombian physician has been successful in removing a thin layer of a patient's cornea, freezing the tissue, grinding it to the shape of a positive lens, and sewing it back onto the cornea. However, Dr Kaufman said this sophisticated surgical procedure involving complex instruments and computer programming has the potential for error because of the required precise surgical skills and complex equipment.

Doctor Kaufman also introduced two simpler procedures with this same living-lens concept which he believes will offer more practical usage to most ophthalmologists. He said the research of Miles Friedlander, MD, Louisiana State University, and others have determined that corneas without living cells can be preserved by freezing or placing them in glycerin solution after they have been ground on a lathe. Dr Kaufman said the preserved corneas are similar to Dr Barroquer's surgically-corrected corneas, except that the preserved corneas can be ground outside the operating room and ordered by physicians from a facility when corneas are needed for surgery. Dr Kaufman said cells will re-enter the preserved cornea after surgical implantation and once again become living tissue.

Dr Kaufman concluded his lecture by describing an even less complex surgical procedure which involves attaching previously-shaped corneal tissue without removing the patient's original cornea. This affixed tissue may be removed if it does not correct the patient's problem.

"Its apparent safety and technical simplicity could make it available to all ophthalmic surgeons, particularly if the pieces were supplied from a central donor bank already shaped and ground to the required specifications." However, the doctor cautioned that this technique is still new and in the experimental stages. But he said if the long-term results prove to be as successful as the earlier experiences with this new procedure he believes the living contact lens could become a major advance in the treatment of the correction of vision in the aphakic patient. □

AMA Issues Journal Internationally

"Since it's clearly evident that the American Medical Association is a leading source of medical information, we have a responsibility to make that information available internationally," says James H. Sammons, MD, executive vice president of AMA.

Doctor Sammons said that two new contracts have been made for translated versions of JAMA to begin publication in January for distribution in Japan and France.

In addition to these new contracts other translated versions of JAMA are already distributed to Spain, Mexico, Colombia, Argentina, Venezuela, Brazil, Portugal, and Central America.

Doctor Sammons said the editorial stance of the publication has helped to promote its international popularity.

According to a release by the AMA these editorials are expected to expand into the new international markets to provide a vehicle for the exchange of information between countries.

The AMA produces a variety of publications and the total annual circulation is almost 34 million copies. These publications include JAMA, American Medical News and nine specialty journals. This circulation makes AMA the world's largest medical publisher. □

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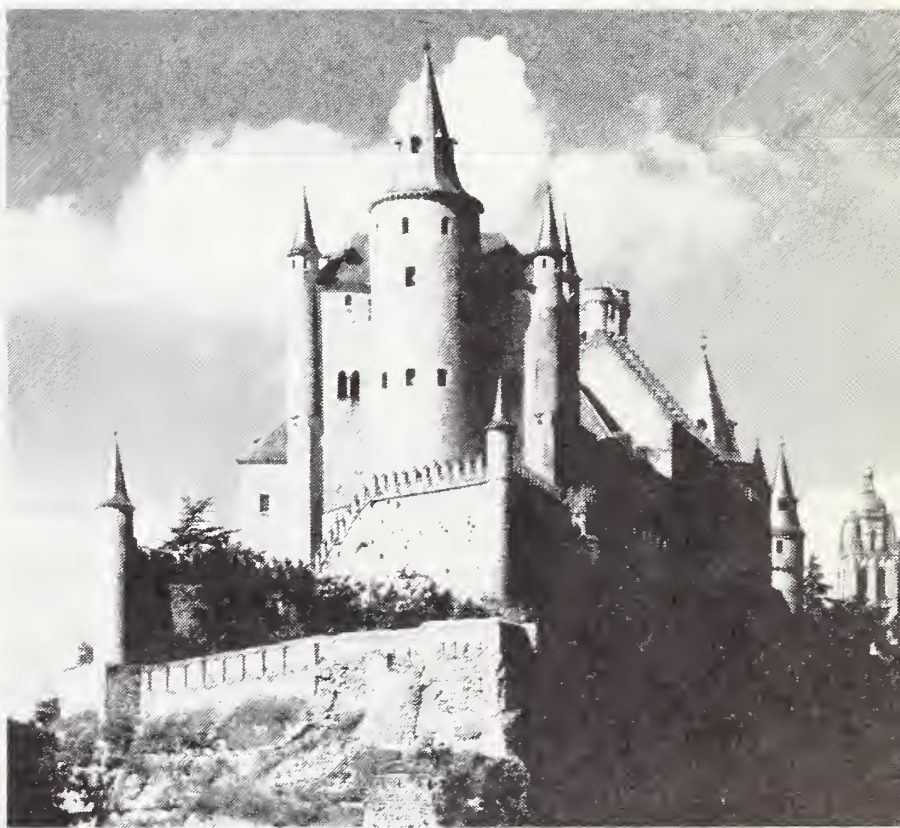
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ACC To Hold 29th Session In Houston

The 29th Annual Scientific Session of the American College of Cardiology will be held March 9-13, 1980, in the Houston Civic Center Complex, Houston, Texas.

Mini-courses will open this five-day session on Sunday, March 9, while lectures, symposia, a luncheon and some evening fireside panel discussions are planned for the rest of the session.

Presentations of 380 papers will be introduced throughout the seminar. These papers were selected from a record-setting 1,750 abstracts submitted to the Scientific Program Committee.

Other features during the session will include a technical exhibit of products and services, the Convocation (a ceremony in honor of the new Fellows admitted to the college) and the annual dinner dance.

Headquarters hotels for the cardiology meeting are the Hyatt Regency Houston and the Sheraton Houston. □

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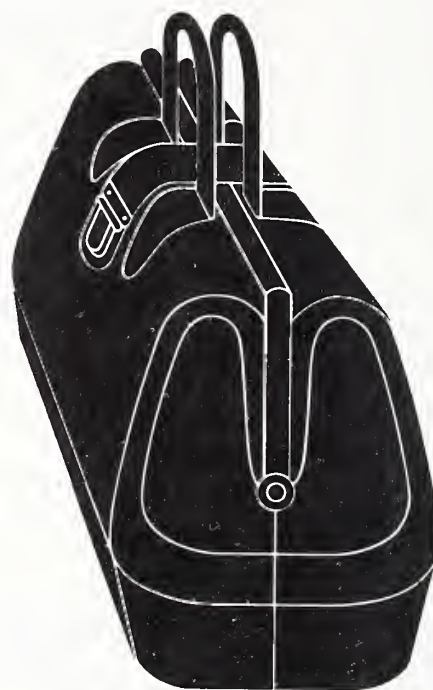


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DEATH

RONALD H. BORTZ, MD
1935-1979

Ronald H. Bortz, MD, a Grove general practitioner, died November 5, 1979. Born in Greensburg, Pennsylvania, Dr Bortz was graduated from the University of Colorado School of Medicine in 1965. He had served with the US Air Force for many years before establishing his practice in Grove. □



The Hospitality House prior to its completed renovation.

Home Away From Home

Skimpy meals and restless hours of sleep in waiting rooms and parked cars describes the lifestyle of many family members during the hospitalization of out-of-town patients. Even the most devoted family will find it difficult to continue this pattern without assistance.

Oklahoma is one of two states which are now prepared to meet the unique needs of the patient's family. Those needs are met at the Hospitality House located at 715 N.E. 13th.

This dormitory-type facility features the environment of a home, even to the point that those staying at Hospitality House help with cleaning and cooking. One unique aspect of the facility is that no fees are charged for the lodging, food or laundry services. The house is operated without state or federal funds and depends entirely upon contributions from organizations and citizens throughout Oklahoma.

Referrals made by the social services departments and chaplains from the various Oklahoma City hospitals determine what families will be placed there. Mrs Kathryne Luton, board president for the Hospitality House said priorities will not be strictly determined on the basis of financial need only. She said the home offers an environment of emotional support and that families who need this help will receive priority.

Mrs Luton who is also the director of patient-relations at Oklahoma City's Presbyterian Hospital said she recognized the need to help out-of-town family members immediately after accepting the Presbyterian position in January, 1978.

"But I just didn't have any answers. Then I read about a hospitality house in Nashville, Tennessee."

Mrs Luton visited the Nashville facility and found a home away from home for families with hospitalized relatives. Mrs Luton brought plans for a similar facility back to Oklahoma with a spirit of determination.

"If they could do it, so can we."

Mrs Luton began this project as a volunteer for all Oklahoma City hospitals. First she organized the Board of the Hospitality House consisting of 11 members with various occupational backgrounds. In January, 1979 Oklahoma's Hospitality House was incorporated as a non-profit organization and issued tax exempt status.

Interest in this project soon began to mushroom. Last May an anonymous donor provided a house for the project, but necessary renovation was estimated at \$50,000; in August, a mere \$2,700 was available.

Despite its financial limitations, Miss Joan Ritchie, a former volunteer at Nashville's Hospitality House agreed to assume the directorship of this project late this summer.

"I can live by faith easier than by trying to figure out life's uncertainties," she said.

Within one month after her arrival the \$2,700 grew to more than \$40,000 with the financial help of several foundations and organizations. Contributors include: Junior Hospitality Club, McGee Foundation, Oklahoma City Allergy Clinic, Oklahoma City Clinic, Oklahoma Community Foundation, Oklahoma Medical Society Community Foundation and the V. V. Harris Foundation.

Although generous contributions have enabled the Hospitality House to open its doors, Mrs Luton says volunteers, materials and \$1,200 per month for operating costs are necessary to keep the Hospitality House open. □

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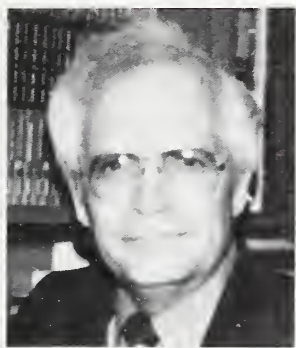
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The OSMA also sponsors companion programs to further meet your economic needs should an accident or illness strike . . . they are the **Overhead Expense Insurance, Full-Time Accident Insurance** and no-hassle **Hospital Indemnity Insurance** plans, all offering high-benefit, low-cost coverages which are only available through group arrangements of this type. For full particulars, contact Don Lanier at . . .

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Doctor Rides His Big Bike For Thousands of Miles



L. W. Ghormley, MD

Motorcycles found no special favor with L. W. Ghormley, MD, Blackwell, until one Christmas. That December day marked the beginning of a new-found motorcycling interest inspiring thousands of cross-country miles for this doctor and his wife.

Motorcycles are a popular worry to parents with teenage sons. But this couple has five daughters. Two of them, however, requested motorcycles as Christmas presents in 1974, and their father purchased two non-street legal Mini-Honda 50's.

Doctor Ghormley's 145 pound frame qualified him to experiment with his daughters' small Hondas. The fun he had made him receptive to a later request by one of these girls . . . she wanted a street legal motorcycle with much more power.

Again the doctor submitted and as he tested this larger cycle, his personal interest began to increase. Just one year after he bought those two Christmas gifts, the doctor purchased his own two-wheel vehicle. But small — it was not. The doctor bought a 750 BMW weighing 500 pounds.

The physician said he must now laugh at the experiences he had while learning to maneuver this big, powerful machine. On one occasion he said he was averaging a full 30 miles per hour, but that he did not pay adequate attention to the street's surface. It was gravel-coated. He braked and the big bike jumped the street's curb and the doctor said if it had not been for the sideslip of the bike, it would have entered through the picture window of the local chiropractor's home. Instead, Ghormley's bike cut tire marks through the man's lawn. "If the chiropractor ever found out who left those skid marks in his yard, I never knew it," Ghormley said.

When the doctor finally assumed comfortable control of his BMW, he taught his wife to ride it and to her surprise, she too found pleasure in this newly acquired vehicle. "It took some getting used to at first, but now we're both hooked on it," the physician said.

The couple's new-shared interest made them ambitious for adventure, so they headed south to Texas for their first, short-run weekend trip. This venture inspired two westward trips on their BMW through a mountainous pass to Denver. Later the couple made weekend trips through the mountains and hills of Arkansas and Missouri.

These weekend jaunts merely incited the couple to plan a longer and much farther trip. During the summer of 1977 the Ghormley's mapped out their route to Canada. They invited another enthusiastic cycling couple to venture north with them. The foursome left Blackwell with two large motorcycles fully equipped with camping supplies and a sign strapped to the back of Ghormley's vehicle which said "Canada or Bust."

They traveled leisurely through St. Louis and Indianapolis before turning north through Michigan. This Blackwell motorcycling squad crossed the Mackinac Bridge into Sault Saint Marie on the third day of their 12-day excursion. The entire trip totalled almost 3,500 miles.

After his first vacation by motorcycle Ghormley said he favored cross-country trips. The following summer Ghormley and his wife went back to Canada by a different route through Memphis, Tennessee to New York and then into Canada. This round-trip venture totalled to 4,000 miles.

Since Ghormley purchased his BMW three years ago, the doctor has traveled with it 24,000 miles. He said he has found relaxation with the weekend jaunts and his cross-country experiences. "When the engine revs up into a whine and the cycle roars down the road a free creature, I do not worry about National Health Insurance and the latest bulletin from the Department of Health, Education and Welfare. I'm temporarily content," the doctor said.

Ghormley is already considering new ideas for future motorcycling ventures. He said he would like to drive the Alaskan Highway next summer. He also said he has been toying with what he considers to be the ultimate motorcycling venture . . . sending his BMW to Afghanistan and then driving it along the 33 mile Khyber Pass between Afghanistan and Pakistan. □

(News Continued on Page ix)

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V-Cillin K[®] penicillin V potassium

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before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

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Medical Mountains

You know the old, frayed cliché: People climb mountains because the mountains are there. Recently, I've had an uneasy feeling that this hackneyed expression is becoming applicable to the contemporary practice of medicine. If my apprehensions are justified, culpability is shared, although unequally, by the faculties in our medical schools, the designers of our physician-training programs and by those imprudent people who determine reimbursement policies for our health insurance underwriters.

Medicine's mountains are those innumerable procedures and tests which have been developed during the past few years in an effort to strengthen our diagnostic skills and enhance our ability to preserve lives. Applied with meticulous discrimination and interpreted in the context of clinical circumstances, most of these procedures can provide accurate and vital information which often cannot be obtained in any other way. Unfortunately, we often institute these procedures and subject our patients to these tests, because they are there rather than because they are necessary or even beneficial in the development of diagnostic or treatment programs for our patients. Frequently, it seems these usually expensive, sometimes elaborate techniques are employed as substitutes for talking to and carefully examining our patients. When combined with the employment of check-list histories and physical examinations which are completed by non-physicians working in offices and hospitals these no-touch, no-talk tests and procedures replace the total patient-physician relationship. Surely such abuse was not intended by the developers and promoters of such techniques but obviously such abuse is tolerated and rewarded even when they are carried out before the physician who ordered them meets the patient who submits to them.

How often do the results of a stress test ECG accurately, appropriately and significantly alter the diagnosis or treatment indicated by the findings of a detailed history and a complete, skillful examination of the patient? And should the results of a liver biopsy or a kidney biopsy or a gastroscopic examination or a bone scan or an arteriogram or an ultrasound echogram or a serologic study or a blood-chemistry panel or a drug screen be accepted as conclusive decrees in the search for the most accurate

diagnosis and the most appropriate treatment of our patients?

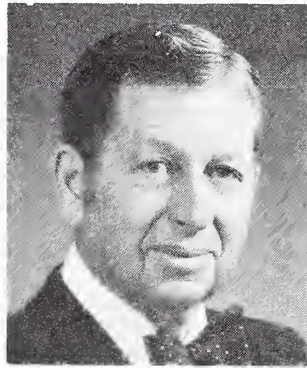
It is a simple matter to order one or all of these tests on any one or all of our patients. The rather alarming proliferation of well-trained and competent sub-specialist colleagues anxious to assist in carrying them out has helped make it so. The ease of requesting them belies the difficulties attending their judicious utilization. These difficulties are formidable and not frequently mastered. Foremost among them is discerning which patients should have what studies and which of those studies are truly apt to benefit the patient and which will provide only additional, needless information or satisfy an incidental curiosity. The greatest of all difficulties in this mountain-climbing is, understandably, encountered by the patient who must pay all the costs of the expedition, irrespective of his ability to do so and apart from the fact that he rarely — if ever — is given an option.

It is a strange truth, however, that most health insurance policies will allow reimbursement for almost anything that is done **to** patients — from electroencephalograms to colonoscopies — but few will allow reimbursement of expenses incurred in doing something **for** them. The time required to obtain a detailed history and conduct a complete physical examination or to educate a patient about his illness and its treatment and to thoroughly advise him about alternatives, or to prepare an accurate and complete health record is treated as inconsequential or completely ignored as a valid, valuable and compensable item.

Nearly everything we do **to** patients seems to be endowed with a prestige not enjoyed by the things we do **for** them. They are lionized by our media and the laity, they are promoted by our schools, they are pursued by our students and they are paid for by all of us.

I strongly suspect, however, that many of them are done only because they can be done. Like the mountains, they are there. MRJ

PLICO — Physicians Liability Insurance Company—is a reality. At this writing over \$800,000 of the \$1,200,000 capitalization has been paid. That is a tremendous demonstration of support from our state physicians.



While PLICO's potential for savings is one of its greatest assets, more important is the fact we now control our destiny in an area that has become extremely critical to our medical practice. There are twenty-six other physician-owned insurance companies in the US that are writing 40 percent of the professional liability coverage for doctors. Some of the companies are five years old and continue to meet established tests for solvency and good business practices. PLICO becomes a part of a successful national trend. It is important to remember how and why we came to the decision to organize PLICO. Until the 1960s malpractice premiums, even malpractice lawsuits, were not a major concern of most physicians. As a percentage of overhead the cost of coverage was not significant, and the number of lawsuits related to insureds was less than today.

As patients became more litigation minded and losses increased, insurance companies panicked. Most companies had ignored the malpractice component of their casualty business; data and actuarial studies were inadequate to predict expected losses. Spiraling

premium increases resulted as much as 100 percent in the '67-'77 decade.

While the national market was in chaos, Oklahoma physicians were enjoying reasonable rates because of several unique characteristics of the OSMA plan. First, OSMA's Committee on Insurance (later Council on Members Services) had designed its own insurance contract that required validated loss data each year, this prohibited emotional premium adjustments. Second, our claims, settlements and jury awards did not correspond to national trends. Third, and most important, is the cohesiveness of Oklahoma physicians. Since the program's inception OSMA members have supported the OSMA group plan. Most practicing physicians have for the past 15 years opted to join the plan and actively participate in certain management aspects of the program — particularly underwriting.

It was these special characteristics that made it possible to start PLICO. If they can be maintained, there is little doubt that PLICO will be a successful venture for Oklahoma doctors.

The transition from commercial carriers to our own company has been extremely smooth, a commentary on our excellent management company and the preparations of our Council on Members Services, Board of Trustees and House of Delegates.

PLICO needs and deserves our support — it is in our own best interests.

Wm. McLebman, M.D.

Early and Late Results of Duodenal Ulcer Disease Treated by Vagotomy-Pyloroplasty and Vagotomy-Antrectomy

M. ALEX JACOCKS, MD
JAY P. CANNON, MD

Surgical therapy for duodenal ulcer disease when indicated can be used safely and with a minimum of complications.

INTRODUCTION

To evaluate the surgical management of duodenal ulcer disease at this institution, a retrospective study of 315 consecutive patients treated by vagotomy-pyloroplasty or vagotomy-antrectomy between July 1, 1970 and July 1, 1976 was undertaken. The results indicate the degree of success in the elective and the emergency surgical management of this disease. Postlethwaite¹ has stressed the four most important considerations in evaluating operations for duodenal ulcers are the postoperative mortality rate, severity and in-

cidence of early postoperative complications, the development of recurrent ulcers, and the incidence and severity of late postoperative sequelae. These aspects are evaluated and discussed.

METHODS AND DEFINITIONS

The names and chart numbers of all patients who underwent vagotomy-pyloroplasty or vagotomy-antrectomy for duodenal ulcer disease at University Hospital, Veterans Administration Hospital, or Children's Memorial Hospital between July 1, 1970 and July 1, 1976 were reviewed. When follow-up had not been obtained within three months of the onset of this study, efforts were made to obtain follow-up information. One hundred forty-four (144) patients were contacted by letter and asked to fill out and return a "Yes-No" type questionnaire with comments. Seventy-four (74) patients who live in the local area were contacted by telephone and interviewed directly regarding postoperative symptoms and results. Chart reviews, questionnaires, and telephone interviews were directed towards operative mortality, early and late postoperative complications, and recurrent ulceration. Late postoperative complications were evaluated only in those patients who had been closely fol-

From The Department of Surgery, The University of Oklahoma Health Sciences Center, PO Box 25606, Oklahoma City, Oklahoma 73125.

Table I—Patient Data by Operation

	V-P	V-A c BI	V-A c BII
Age Range	17-85	24-78	23-82
Average Age	51	49	51
Sex M/F	178/27	36/4	60/12

lowed for more than six months postoperatively.

The age and sex distribution of the patients in each operative group are shown in Table I. The indications for operative treatment included: (1) intractable pain after adequate medical management, (2) hemorrhage uncontrolled by medical means, (3) perforation, and (4) obstruction. Table II shows the distribution of operative indications compared with other literature reports.²⁻⁵ Intractability in our series represents the immediate preoperative indication. Patients who had previously had perforations or bleeding ulcers oversewn and were re-admitted at a later date for a vagotomy and drainage procedure were considered as intractable, along with those who had non-healing ulcers.

EARLY POSTOPERATIVE COMPLICATIONS; RESULTS AND DISCUSSION

The early postoperative mortality, *ie* those occurring within thirty (30) days of discharge from the hospital is shown in Tables III and IV. There were no operative or early postoperative deaths following vagotomy-

Table IV—Postoperative Mortality
for Emergency Operations

	1971					
	OUHSC	Sleisinger	1964	1974	Connecticut	
	V-P	V-A	Fordtran	Hardy	Himel	Coop Study
Mortality	6%	5%	10-20%	20%	4.6%	12.5%

pyloroplasty and one death after vagotomy-antrectomy following elective procedures, as shown in Table III.¹⁻⁶ Table IV reveals the deaths following emergency procedures, 6% after vagotomy-pyloroplasty, and 5% after vagotomy-antrectomy.^{3, 7, 8, 9} In the vagotomy-pyloroplasty group, five deaths resulted from complications of hemorrhage, one from sepsis, three from myocardial infarctions, one cancer of the gall bladder, one cerebral vascular accident, one liver failure, and one of unknown cause. In the vagotomy-antrectomy group, three died with sepsis, one of myocardial infarction, and one of pancreatitis.

The other early postoperative complications considered are shown in Table V. Early postoperative diarrhea, 6-7% was significantly less in this center than other reports, 5-60%.^{3, 7} Most of the cases encountered resolved while in the hospital after treatment with small, dry, frequent meals and, occasionally, medications. However, there were no cases so severe as to warrant re-operation.

The group of patients treated by vagotomy-antrectomy had higher incidences of gastric atony, intraabdominal abscesses, fistula formation, and dehiscence of anastomosis, as might be expected considering the greater magnitude of this operation.

Table II—Indications for Operative Treatment of Peptic Ulcer Disease
by Percent of Patients Treated

	OUHSC		1970 Price		Sleisinger and Fordtran PUD	1970 Jordan-Condon		1975 Dwight	
	V-P	V-A	V-P	V-A		V-P	V-A	V-P	V-A
Intractable	40	46	44.2	47.1	40-50	66	78	59	63
Hemorrhage	35	46	6.8	5.4	33	22	13	20	27
Perforation	15	3	26.4	27.2	20	1	2	2	2
Obstruction	10	33	22.6	20.2	10	11	7	18	8
Total	100	100	100	99.9		100	100	100	100
No. of Patients	205	111	337	331		107	91	49	51

Table III—Postoperative Mortality by
Procedure and Center for Elective Operations

	OUHSC	1970 Price	1973 Postlethwaite	1970 Jordan	1975 Dwight	1972 Goligher	Sleisinger Fordtran
V-P	0	2 (0.6)%	0.6%	2 (1)%	0	1 (0.5%)	1.0%
V-A	1	3 (0.9)%	0.9%	0	0	0	1.5-2.0%

Table V—Early Postoperative Complications by Percent of Patients Treated

	OUHSC		Sleisinger And Fordtran	Hardy 1964	Jordan-Condon 1970		
	V-P	V-A			V-P	V-A c BI	V-A c BII
Hemorrhage	5	5	5	5			
Obstruction	2	2		2	1.0	0	0
Gastric Atony	2	5	4	2.3			
Wound Infection	6	7	3.3-10		7.4	6.0	16
Intra-abdominal abscess	2	4	1.5				
Fistula Formation	2	5	0.5-1.0	1.6	2	1.4	5
Dehiscence of Anastomosis	0.5	5	3	3.6			
Diarrhea, Mild	6	7	60				
Severe	0.5	0					
Splenic Injury	4	5	5-6	4.8			
Other		6		1.3			

LATE POSTOPERATIVE COMPLICATIONS, RESULTS AND DISCUSSIONS

Jordan and Condon¹ in 1970 reported a prospective study of vagotomy-pyloroplasty and vagotomy-antrectomy cases followed for five years. A decreasing incidence of all late postoperative sequelae was noted except the recurrence rate which increased slightly with time. Therefore, patients with follow-up periods of less than six months were deleted from this part of the study. Efforts were made to reach all patients, however, many could not be contacted. Follow-up of greater than six months was achieved in 150 of the 205 vagotomy-pyloroplasty group, 33 of the 40 vagotomy-antrectomy with the Billroth I group, and 51 of the 72 vagotomy-antrectomy with Billroth II group. Follow-up of 6-to 81-months was obtained in all groups with at least 57% of all groups being followed for at least 24 months.

There were 21 late deaths in the vagotomy-pyloroplasty group, none in the vagotomy-antrectomy with Billroth I group, and five in the vagotomy-antrectomy with Billroth II group. Only one of these deaths could be associated with the gastric procedure. A 57-year-old male in the vagotomy-pyloroplasty group died six months postoperatively of malnutrition and respiratory failure after a recurrent antral ulcer. Other deaths were attributed

to such diagnoses as cancer, cardiovascular disease, liver failure, and pneumonia.

Table VI compares the number of recurrent ulcers found with other reports based on the type of operation performed.^{1, 2, 3, 5, 6, 10, 11} There were 16 proven or highly suspicious recurrent ulcerations in the 234 patients followed. Thirteen (13) followed vagotomy-pyloroplasty of which five required re-operation. One (1) followed vagotomy-antrectomy with Billroth I which required re-operation, and two (2) followed vagotomy-antrectomy with Billroth II, of which one (1) required re-operation. The average time interval for recurrence was 8.8 months for the vagotomy-pyloroplasty group, nine months for the vagotomy-antrectomy with Billroth I group, and 12.3 months for the vagotomy-antrectomy with Billroth II group. The differences between the vagotomy-pyloroplasty and the vagotomy-antrectomy groups are significant to the 0.05 level. The differences noted among the different reports are not statistically significant.

Table VII shows the incidence of some of the late complications which were studied. Late hemorrhage occurred in 5% of the vagotomy-pyloroplasty group and 6% in the vagotomy-antrectomy group. Epigastric pain, either ulcer-like symptoms or other types of pain such as hiatal hernia discomfort, was the most common complaint. These incidences are in general concord with other reports.^{1, 2, 10} Early

Table VI—Recurrence Rate By Procedure and Center By Percent of Patients Treated

	OUHSC	1970 Price	1973 Postlethwaite	1974 Jordan	1975 Dwight	1972 Goligher	1975 Kronberg	Sleisinger Fordtran
V-P	8.7	7.4	9.6	8.3	3	6.7-7.3	9.3	6-10
V-AcBI	3			1.1		0-5.2		
V-AcBII	4	3.3	5.7	0	2			1

Table VII — Late Postoperative Complications By Percent of Patients Treated

	OUHSC		1970 Price et al		1973 Postlethwait		1974 Jordan		1968 Goligher		1972 Goligher		Sleisinger Fordtran
	V-P	V-A	V-P	V-A	V-P	V-A	V-P	V-A	V-P	V-A	V-P	V-A	
Hemorrhage	5	6											
Epigastric Pain													
Ulcer like	17	11	10.0		30.03	30.3	5	7.5					
Other	17	17	6.2										
Early Satiety	10	14	15.8	19.9	12	17.3	8	12.5	46.8	35.0	37.1	36.3	
Efferent Loop Syndrome	6	7					6	16	7.7	4.9	4.4	9.6	
Bilious Vomiting	3	5			1.8	4.9			10.9	13.6	10.1	13.8	
Alkaline Gastr.	1	4											
Diarrhea Mild	12	11	19.5	16.6	20.7	21.5	22	14	20.3	20.5	21.7	23.2	60
Severe	1	2	5.2	5.4					1.9	2.7			5-6
Early Dumping													
Slight	5	8	20.2	19.9									
Moderate	8	6	4.9	8.3					9.7	10.7	11.9	8.6	
Severe	0	0	1.9	0.7			17	26					5-10
Late Dumping													
Slight	2	2											
Moderate	3	7			12.0	17.2			3.2	5.9	1.9	4.3	
Severe	0	0											
Anemia	9	14			3.1	6.5							up to 53
Obstruction	7	5											

satiety, a syndrome of mild bloating, distention and a "full" sensation after a small meal, and symptoms of the efferent loop syndrome, *ie* abdominal distention and vomiting of undigested food soon after eating and not associated with dumping symptoms, also occurred in a small percentage, similar to other reports.^{1, 2, 6, 10, 12} Bilious vomiting soon after a meal, or the afferent loop syndrome, occurred in 3% and 5% of the two groups respectively. This is less frequent than most other reports.^{1, 6, 12} Diarrhea, not associated with other dumping symptoms, was also significantly lower than other reports.^{1, 2, 3, 6, 10, 12} Early dumping usually occurs 30-to-60 minutes following meals and con-

sists of nausea, distention, cramping, occasionally vomiting, diarrhea, palpitations, weakness, drowsiness, dyspnea, and sweating. It is generally felt to be due to the sudden introduction of a large osmotic load in the small bowel with release of various vaso-active substances such as bradykinin and serotonin. The late phase of dumping is associated with the reactive hypoglycemia after a large burst of insulin stimulated by postprandial hyperglycemia and release of intestinal hormones. The hypoglycemic peak is usually about two-to-five hours after a carbohydrate load and presents with faintness, sweating, palpitations, tiredness, and headaches. Both of these syndromes occurred with less frequency than most other reports and most cases which occurred could be controlled with small, dry low-carbohydrate meals.

Weight changes were evaluated in both groups and found to be very similar. Twenty-five percent (25%) of the patients lost weight, fifty percent (50%) had no change, and twenty-five percent (25%) gained weight. Those who had a vagotomy-antrectomy and who lost weight tended to lose slightly more weight than those who lost weight after a vagotomy-pyloroplasty.

SUMMARY

This study had provided a review of the morbidity and mortality of the operative treatment of duodenal ulcer disease in this center. The operative mortality rate for both procedures in elective cases is 0-to-1 percent. Mortality fol-

M. Alex Jacocks, MD, was graduated from the University of Oklahoma College of Medicine in 1977 and is now taking a residency in general surgery. Doctor Jacocks is a member of the Alpha Omega Alpha.

Jay P. Cannon, MD, was graduated from the University of Oklahoma College of Medicine where he is now associate professor of surgery. He is certified by the American Board of Surgery and a member of the American College of Surgeons, the Southwest Surgical Congress, the Association of Academic Surgery and the Osler Society.

lowing emergency procedures of 6% and 5% for the two procedures is less than most other reports. The early postoperative complications have been generally few and relatively minor with a particularly low incidence of diarrhea. Extended follow-up was available in a large number of patients. The recurrent ulceration incidence was 8.7% following vagotomy-pyloroplasty and 3.5% following vagotomy-antrectomy, similar to other reports. Other late complications and nutritional status of patients was similar to other reports with notably low incidences of significant diarrhea, early dumping, and late dumping syndromes. □

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P.O. Box 26901, Oklahoma City, Oklahoma 73190.



SPRING BREAK in PARIS

March 8-15, 1980

The Oklahoma State Medical Association and Travel Planners, Inc. announce a special spring break vacation in Paris. Transportation is direct from Dallas via 747. Accommodations are at the Sheraton Hotel Paris, ideally located within strolling distance of the boutiques, bars and night clubs. While there, see the Louvre Museum, Notre Dame Cathedral, the University of Paris, and the many other sites of Paris.



The cost of this unique spring break tour is \$999.00 per person based upon double occupancy, but to insure your spot, your \$150.00 deposit is needed now. To receive additional information plus a spring break brochure, contact: Paris Tour, c/o Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, OK 73118. (405) 843-9571.



The Oklahoma State Medical Association sponsors tours to achieve the benefits of group travel for its members. Responsibility for the expenses of conducting this tour are fully borne by the travel company and its sub-contractors.

Please Note:

Price is based as follows:

1. Apex airfare in effect November 1, 1979 and is subject to change prior to departure.
2. Exchange rate of 4.08 French Francs to the dollar.
3. 80 passengers minimum.



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Brief Summary

INDICATIONS: For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

CONTRAINDICATIONS: Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

PRECAUTIONS: Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication. Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

ADVERSE REACTIONS: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

DOSAGE AND ADMINISTRATION:

1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

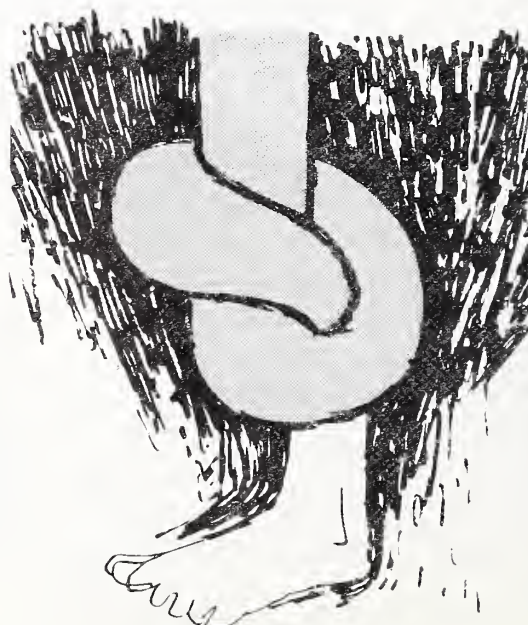
Product Information as of September, 1977
U.S. Patent 2,985,558

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Epidemiological and Clinical Aspects of Female Breast Cancer in Oklahoma City Hospitals

VIVIEN W. CHEN, PhD
NABIH R. ASAL, PhD

Although breast cancer cases are diagnosed slightly earlier in Oklahoma, the use of modified and radical mastectomy in the state lags behind the nation.

INTRODUCTION

Studies have revealed that Oklahoma women experience a lower breast cancer mortality rate than has been reported for the nation.^{1,2} The average annual age-adjusted death rates for the period 1950-1969 were 19.55 and 17.89 for white and non-white females compared to the corresponding US figures of 25.51 and 22.10 using 1960 US population as the standard population. For the United States, Oklahoma white females were ranked seventh lowest in breast cancer mortality, preceded only by the six states of Alabama, Ar-

kansas, Mississippi, New Mexico, North Carolina and West Virginia. Despite these low rates, breast cancer continues to kill more than 350 Oklahoma women annually, and 950 new cases were estimated for the year 1978 alone.³ For the past twenty years, the time trends for breast cancer mortality in Oklahoma have shown some interesting patterns. Asal's study⁴ reported a stable age-adjusted mortality rate for white females during a ten-year study period, 1956-1965, but a slight increase among the non-white females. Table 1 and Figure 1 present more recent age-adjusted mortality rates of female breast cancer in Oklahoma by race and year, 1965-1976, using 1970 US female as the standard population. The mortality rates for white females remained fairly stable after the increase in 1968, whereas the rates for non-whites fluctuated greatly. The fluctuation is partly due to the small number of breast cancer deaths among the non-white females. The average age-adjusted death rate over the twelve-year period was 23.4 for both white and non-white females, which was lower than a comparable national rate of 29.2 per 100,000 in 1970.

Although much interest and emphasis has been generated regarding breast cancer in Oklahoma in the past few years (Haberman's Breast Cancer Detection Demonstration Project was established in 1973 and Hoge's Okla-

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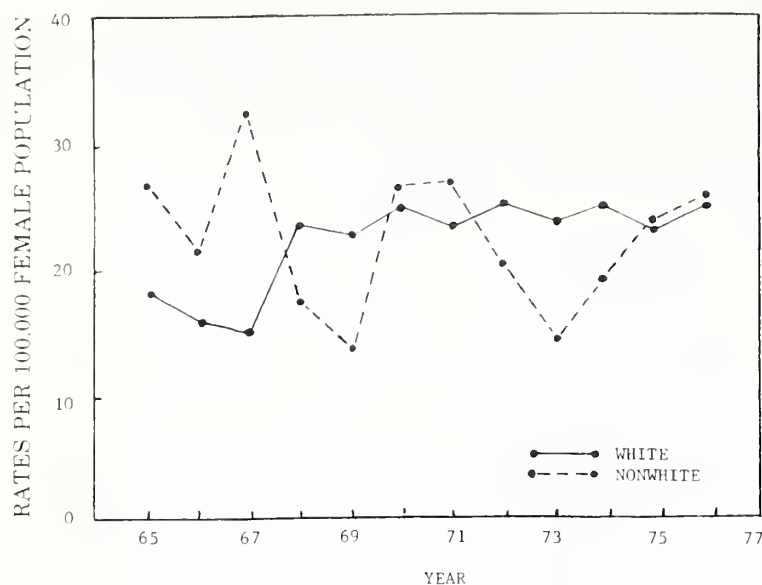


Figure 1. Female breast cancer mortality rates in Oklahoma, by race and year, 1965-1976.

homa Hospitals Breast Cancer Control Network was set up in 1974), no epidemiologic studies have been performed in the state. The main objectives of this study are to describe the epidemiologic and clinical features of female breast cancer in Oklahoma, a geographic area with relatively low rates, and to compare some findings with national data. This report is only part of a comprehensive epidemiologic study of breast cancer recently completed.⁵

MATERIALS AND METHODS

Study Population

A case of breast cancer was defined as primary malignancy of the breast (ISC — 174.0, 8th Revision) that had been histologically confirmed and was registered as such in the pathology records and/or hospital records. The study population comprised all newly diagnosed female breast cancer cases admitted to six major Oklahoma City hospitals from July 1, 1974 through June 30, 1975. Out-of-state residents were excluded from this study.

Collection of Data

Information was obtained from hospital records. Prior to the study, approval was obtained from the hospital administrator and/or chief of staff. Medical records were reviewed and the basic demographic and clinical data recorded. Information regarding the patient's present disease, past medical history, reproductive ex-

perience, menstrual history, level of education, height and weight were also collected. Frequency distributions and interrelationship of variables associated with clinical features of female breast cancer were examined. Confidentiality of data was maintained throughout and only group data will be reported.

RESULTS

Age and Race Distribution

A total of 318 new cases of breast cancer were diagnosed in six hospitals during the one-year study period. Table 2 shows the distribution by age and race. There were 291 or 91.5 percent white and 27 or 8.5 percent non-white females. The non-white group consisted of all blacks except for one Indian female.

The figures indicate that carcinoma of the breast in females is a disease that occurs most commonly in the fifth to seventh decades of life. In this study, breast cancer was most frequently present in age group 50-59 years (40.7 percent) among the non-white patients and in age group 60-69 years (31.3 percent) among the whites. In general, the non-whites experienced the disease at earlier ages. The mean age of incidence for the total group was 59.1 years and the figures for whites and non-whites were 59.5 and 54.9 years, respectively.

Marital Status

The distribution of breast cancer cases by marital status is presented in Table 3. Two-thirds of the patients were married at the time of diagnosis. About 22 percent were widowed

TABLE 1
Age-Adjusted Mortality of Female
Breast Cancer in Oklahoma,
by Race and Year, 1965-1976

Year	White Female		Non-White Female	
	Number	*AADR/100,000	Number	*AADR/100,000
1965	229	18.3	30	26.9
1966	203	15.8	25	21.8
1967	196	14.9	39	32.5
1968	302	23.7	21	17.1
1969	293	22.8	17	13.7
1970	328	25.0	34	26.5
1971	310	23.2	36	27.1
1972	345	25.6	27	20.2
1973	324	23.8	20	14.4
1974	348	25.2	28	19.6
1975	336	23.8	35	23.8
1976	359	25.1	38	25.5
1965-76	3,573	23.39	350	23.39

*Age-Adjusted Death Rate based on the 1970 U.S. Females as standard population.

TABLE 2
Age and Race Distribution of 318 Breast Cancer
Cases Diagnosed in Oklahoma City Hospitals,
July 1974-June 1975

Age	White		Non-White		Total	
	Number	Percent	Number	Percent	Number	Percent
<30	5	1.7	0	0.0	5	1.6
31-39	12	4.1	4	14.8	16	5.0
40-49	45	15.5	4	14.8	49	15.4
50-59	78	26.8	11	40.7	89	28.0
60-69	91	31.3	4	14.8	95	29.9
70-79	41	14.1	3	11.1	44	13.9
80+	19	6.5	1	3.7	20	6.3
Total	291	100.0	27	99.9	318	100.0
Mean Age	59.5		54.9		59.1	

and 6.7 percent divorced and/or separated which brings the total of the "ever married" group to more than 95 percent of the patients. Only 4.5 percent (14 patients) had never been married.

Clinical Aspects

Location of Lesion and Bilaterality

Lesions of the breast occurred fairly equally in both breasts with a slight preponderance of the left. About half of the patients (161 or 50.6 percent) had breast cancer in their left breast while 150 patients (47.2 percent) had the lesion on the right. Seven patients (2.2 percent) were diagnosed as having carcinoma in both breasts during the one-year study period. Of the 318 breast cancer patients, 21 (6.6 percent) were bilateral cases. This figure included the seven cases that were diagnosed bilaterally during the one-year period and 14 additional patients who had had cancer previously in the other breast.

Histological Cell Type

The distribution of breast carcinoma cases

TABLE 3
Distribution of Breast Cancer Cases
by Marital Status

Marital Status	Breast Cancer Cases	
	Number	Percent
Single	14	4.5
Married	209	66.6
Widowed	70	22.3
Divorced and Separated	21	6.7
*Total	314	100.1

*Marital status was not reported in 4 cases.

by histological cell type is presented in Table 4. Of the 318 breast cancers identified, only five cases did not have a histological cell type reported. About ninety-six percent of the reported cases had only one histological cell type while 4.5 percent contained mixed tumor cells.

Ductal carcinoma, both intraductal and infiltrating, was the most common tumor cell type. It accounted for 78.9 percent of those with one tumor cell type and was present in all tumors with mixed cell types. Lobular carcinoma was the second most common cell type, whereas medullary, papillary, colloid (mucinous), inflammatory and poorly or undifferentiated carcinomas (altogether accounting for about 10 percent of the cases) were less frequently reported. Included in the "other carcinomas" were one Paget's disease, one well-differentiated tubular carcinoma and two cases of adenocarcinoma.

Stage of Disease at Diagnoses

The stage of disease was not reported in only nine breast cancer cases at the time of diagnosis and the distribution of reported cases is given in Table 5. More than half (52.1 percent)

TABLE 4
Distribution of Breast Cancer Cases,
Diagnosed in Oklahoma City Hospitals
July 1974-June 1975, by Histological Cell Type

Histological Cell Type	Breast Cancer Cases	
	Number	Percent
One Histological Cell Type	299	95.5
Ductal Carcinoma	236	(75.4)
Lobular Carcinoma	29	(9.3)
Colloid (Mucinous) Carcinoma	6	(9.6)
Medullary Carcinoma	5	
Papillary Carcinoma	5	
Inflammatory Carcinoma	3	
Poorly and Undifferentiated Carcinoma	11	
Other Carcinomas	4	
Mixed Histological Cell Type	14	4.5
Ductal Carcinoma and Paget's Disease	4	
Ductal and Lobular Carcinomas	4	
Ductal and Colloid Carcinomas	3	
Ductal and Medullary Carcinomas	1	
Ductal and Inflammatory Carcinomas	2	
*Total	313	100.0

*Histological cell type was not reported in 5 cases

TABLE 5

Distribution of Breast Cancer Cases,
Diagnosed in Oklahoma City Hospitals,
July 1974-June 1975, by Stage of Disease

Stage of Disease at Diagnosis	Breast Cancer Cases	
	Number	Percent
In Situ	15	4.9
Localized	146	47.2
Regional	130	42.1
Axillary node involvement	117	
Extended (involvement of skin, muscle and chest wall)	7	
Node involvement and Extended	6	
Distant Metastasis	18	5.8
*Total	309	100.0

*The stage was not reported in nine cases

of the 318 patients admitted with primary carcinoma of the breast had localized disease. One-hundred-thirty cases (42.1 percent) showed evidence of regional metastasis of the tumor. The most frequent metastatic site was the involvement of axillary lymph nodes. Thirteen patients with regional metastases had the disease spread to the chest wall, skin and pectoral muscles. Only 18 cases (5.8 percent) were found to have wide dissemination of cancer.

Treatment

Surgery was the treatment received in nearly all cases. Only 11 patients did not receive any kind of surgery. Table 6 shows the distribution by type of surgery received during hospitalization. About 89 percent of the patients received a standard or modified radical mastectomy where the breast tissue and the axillary contents were removed along with all or part of the pectoral muscles.

TABLE 6
Distribution of Types of Surgery Received
by 318 Breast Cancer Patients
During Hospitalization

Type of Surgery	Breast Cancer Cases	
	Number	Percent
Radical Mastectomy	223	70.1
Modified Radical Mastectomy	59	18.6
Extended Simple Mastectomy	5	1.6
Simple Mastectomy	12	3.8
Lumpectomy/Quadrectomy	8	2.5
No Surgery	11	3.5
Total	318	100.1

TABLE 7

Distribution of 318 Breast Cancer Cases by Type
of Treatment Received During Hospitalization

Type of Treatment	Breast Cancer Cases	
	Number	Percent
Surgery only	191	60.1
Lumpectomy	2	
Simple Mastectomy	5	
Extended Simple Mastectomy	3	
Modified Radical Mastectomy	37	
Radical Mastectomy	144	
Surgery + Radiation	83	26.1
Surgery + Hormone/Chemo- therapy (with/without radiation)	25	7.9
Other Type or Combinations	17	5.3
No Treatment	2	0.6
Total	318	100.0

Radiation treatment, hormone therapy and chemotherapy were accompanied with surgery in most patients with metastatic disease. One-third of breast cancer cases (106 patients) received radiation therapy. Of these, 84 percent (89 patients) were given radiation as post-operative treatment. The hospital records also showed 33 patients received hormone therapy and/or chemotherapy and 10 patients had endocrine ablation.

The combinations of treatments received by breast cancer patients are presented in Table 7. One hundred ninety-one patients (60.1 percent) received some type of surgery alone, 83 (26.1 percent) received surgery and post-operative radiation and 25 patients (7.9 percent) had systematic adjuvant therapy (hormone therapy and/or chemotherapy) in addition.

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TABLE 8
Distribution of Breast Cancer Cases by Stage of Disease
and Type of Treatment Received

Type of Treatment	Stage of Disease			
	In-Situ	Localized	Regional Metastasis	Wide Dissemination
Lumpectomy Simple Mastectomy only	0	0	0	2 (11.1)
Extended Simple Modified Radical Mastectomy only	5 (33.3)	25 (17.1)	8 (6.2)	1 (5.6)
Radical Mastectomy only	8 (53.3)	94 (64.4)	42 (32.3)	1 (5.6)
Mastectomy - Radiation	0	20 (13.7)	60 (46.2)	2 (11.1)
Mastectomy - Hormone	2 (13.4)	4 (2.7)	9 (6.9)	3 (16.6)
Chemotherapy				
Mastectomy - Radiation - Chemotherapy Hormone	0	3 (2.1)	6 (4.6)	0
Radiation, Hormone, Chemotherapy (alone or any combination)	0	0	5 (3.8)	8 (44.4)
No treatment	0	0	0	1 (5.6)
*Total	15 (100)	146 (100)	130 (100)	18 (100)

*Stage of disease was unknown in nine cases
Numbers shown in parentheses are percentages

tion to surgery. Of 318 patients, only two received no treatment at all. One had distant metastases and in the other the stage was unknown.

Since treatment of choice often depends on the stage of disease, it was appropriate to examine the types of therapy by stage. Table 8 presents the distribution of treatment received by stage in 309 breast cancer patients whose stage of disease was reported. It was surprising to find that of the 15 patients with *in situ* disease, eight had radical mastectomy. Additionally, of the 146 cases with localized disease 20 (13.7 percent) received radiation therapy adjuvant to mastectomy. Careful inspection of Table 8 reveals some interesting aspects of breast cancer treatment practiced in Oklahoma City.

Methods of Discovery

The distribution of cases by method of detecting or discovering the tumor is shown in Table 9. About three-quarters of the breast cancer lesions were discovered by the patients themselves either by routine breast self-examination (6.3 percent) or casual self-finding (67.9 percent). Fifty-one (17.1 percent) were detected by physicians during physical examination. The two cases categorized as "others" included one case discovered by nursing home personnel and another case by the patient's daughter. It is interesting to note that only 8.1 percent of the cases (24 patients) diagnosed during the study period were detected by screening techniques, either mammography or xerography.

TABLE 9
Distribution of Methods of Discovery in Breast
Cancer Cases, Diagnosed in Oklahoma
City Hospitals, July 1974-June 1975

Method of Discovery	Breast Cancer Cases	
	Number	Percent
Breast Self-examination	19	6.3
Casual Self-finding	203	67.9
Physical Examination	51	17.1
Mammography	16	5.4
Xerography	8	2.7
Others	2	0.7
*Total	299	100.1

*19 cases did not report method of discovery

TABLE 10
Distribution of Breast Cancer Cases by Duration
From Discovery to First Diagnosis

Duration from Discovery to First Diagnosis	Breast Cancer Cases	
	Cases	Percent
<1 month	138	49.5
1-3 months	77	27.6
4-6 months	34	12.2
7-12 months	12	4.3
>1 years	18	6.5
*Total	279	100.1

*Duration was not reported in 39 cases

Duration from Discovery to First Diagnosis

Table 10 indicates the distribution of breast cancer cases by duration from discovery to first diagnosis. About half of the patients (49.5 percent) consulted physicians less than a month after they had the symptoms while 10.8 percent delayed for at least six months or more.

The delay in consulting physicians a month after the onset of symptoms did not appear to be related to marital status. Patients were classified in two groups: those who were diagnosed less than a month after the discovery and those for more than a month. The distribution of the marital status in these two groups is compared in Table 11. An overall analysis yielded an X^2 value of 2.65 with three degrees of freedom and a probability level greater than 0.4. When the single, widowed, divorced and separated were combined as "currently not married" and compared with the "married," the difference was still statistically not significant. An X^2 value of 0.39 with one degree of freedom and a probability value greater than 0.5 were obtained.

DISCUSSION

The current study was retrospective in nature and most of the information was obtained from hospital records. A problem stemming from the use of hospital records as the source of data was the variability of completeness of the records themselves. Fortunately, information on the clinical data was usually complete and missing information on some charts out of a large sample size of 318 did not present a major difficulty.

The findings of this study agree with most previously published clinical data related to the distribution of breast carcinoma by age and race. Breast cancer has been known to be a disease that occurs rarely before age 30 years and in the United States, the largest numbers of breast cancer cases were estimated to occur in age 45-49 through 60-69 years.⁶ Data from the Third National Cancer Survey shows more than three-quarters (77.4 percent) of female breast cancer occurred between ages 40-69 years. In this series, only 1.6 percent of the patients were under age 30 years and more than half (57.9 percent) of the breast cancer cases in the study period occurred between

TABLE 11
Distribution of Breast Cancer Cases by Marital Status and Duration from Discovery to First Diagnosis

Marital Status	Duration from Discovery to First Diagnosis			
	Less Than 1 Month Number	Percent	More than 1 Month Number	Percent
Married	93	67.4	90	63.8
Single	8	5.8	4	2.8
Widowed	28	20.3	37	26.2
Divorced and Separated	9	6.5	10	7.1
Total	138	100.0	141	99.9

$X^2_{(3)} \times 2.65$
 $p > 0.4$

ages 50-69 years. The mean age was 59.5 years which is not at all different from 60.8 years, the mean age of incidence reported for United States female breast cancer in 1966-1968.⁶

Breast carcinoma occurred on the average five years earlier in the non-whites than whites. This could be explained by the fact that the non-whites are a younger population. According to the 1970 Oklahoma census, 35.4 percent of white women were age 45 years and above as compared to only 27.9 percent in the non-whites.

The 27 non-white patients comprised only 8.5 percent of the study population. This is similar to the 8.9 percent reported for mortality data in Oklahoma covering the period 1965-1976. These figures, 8.5 and 8.9 percent, were slightly lower than the 11.1 percent of the non-white population in Oklahoma according to the 1970 census. Since the non-white patients were all black except for one Indian, the proportion of blacks (8.2 percent of new cases) in this study sample is a close approximation of the percentage of blacks (7.5 percent) in the Oklahoma population.

Although the occurrence of breast cancer among the Indians is low, the one Indian patient found during the one-year study period was less than expected. This is probably due to the fact that almost all Indian breast cancer patients seek medical care in their own Indian hospitals and clinics which were not included in this study.

One previous study⁷ found that breast carcinoma occurred more frequently in the left breast. The 1977 National Patient Care Evaluation Study for Female Breast Carcinoma, conducted by the American College of Surgeons, Commission on Cancer, reported similar findings with 50.9 percent of the

tumors located in left breast whereas 48.6 percent in the right.⁸ The slight preponderance of breast cancer in the left breast (50.6 percent) in this study is consistent with these findings. Seven patients (2.2 percent) were diagnosed bilaterally during the study period and the figure is higher than 0.5 percent reported in the American College of Surgeons Survey. Fourteen additional patients had cancer in the other breast previously. These total to 6.6 percent of bilateral cases which was in the range of 4-10 percent reported in the literature. However, if the patients were followed for sufficient time, a higher percent of bilaterality would be expected.

Carcinomas of the breast are predominantly (about 75 percent) of one cell type and of ductal origin. Similar observations were made in this study with 75.4 percent ductal carcinoma. It is interesting to note that ductal carcinoma was present in all mixed cell tumors.

The good prognosis of breast cancer can be explained by the early stages of disease upon diagnosis. In this study more than half of the patients were diagnosed to have localized disease and 85 percent of these patients can be expected to survive up to five years.⁹ When compared with the national data of 48 percent localized disease, 41 percent regional metastases and nine percent distant metastases,⁹ Oklahoma women seemed to have the disease diagnosed at an earlier stage with corresponding figures of 52.1, 42.1 and 5.8. This is probably due to the emphasis on breast self-examination and the publicity surrounding the mastectomies of first lady Betty Ford and second lady Happy Rockefeller which occurred just prior to the period of the study. The recent American College of Surgeons Survey (1977) observed similar stage of disease distribution as the present study showing a slight increase in the early detection of breast cancer.

Radical mastectomy (standard or modified) was received by 88.7 percent of breast cancer patients as definitive treatment. It is surprising to find that only 18.6 percent of surgery done was modified radical mastectomy whereas the American College of Surgeon Survey reported a tremendously increasing use of modified radical mastectomy, from 24 percent in 1972 to 57.7 percent in 1977. Breast cancer patients with distant metastases, inflammatory carcinoma and ulcerated openings were treated palliatively by systemic therapy (endocrine ablation, hormones and chemotherapy) and radiotherapy.

Though hormone therapy and chemotherapy have become more commonly used as adjuvant treatments for patients with regional metastases in recent years, fewer patients were found receiving them compared to adjuvant radiotherapy in this series. It should be noted that information on treatment received in this study was based solely on hospital records and no special effort was made to collect follow-up treatment after the patients were discharged from hospitals. Radiation treatment was usually recorded in hospital charts while hormone therapy and chemotherapy, received as outpatients or at physician's office, were not available in the charts.

The mass or lump, which is the most common clinical symptom of breast cancer, was detected by 74.2 percent of the patients. The finding was higher than the 64 percent observed by the Oklahoma Hospitals Breast Cancer Control Network but similar to the 72.7 percent reported in the American College of Surgeons Survey. Among these patients, less than one-tenth were detected by routine breast self-examination.

Regardless of the fact that the Breast Cancer Detection Demonstration Program and other screening clinics were set up in recent years in Oklahoma, only eight percent of the breast cancer cases were detected by the screening methods. A lower percent (5.2) was reported by the American College of Surgeons Survey. Xerography and mammography were used more often to confirm the suspect masses rather than detecting them.

One would expect to find earlier stages of disease for those who discovered the tumor by breast self-examination than by other means. This study failed to find any relationship between method of discovery and stage of disease. In fact, an equal percentage (6.5 percent) of patients with localized disease and metastatic disease was found to discover the carcinoma by regular breast self-examination. However, patients who practiced routine breast self-examination and discovered the disease by doing so were on the average 11-13 years younger than those discovered by other methods. The average age at the time of diagnosis was 48.1 years. Those discovered by casual self-finding and by physicians were on the average 59.4 and 60.6 years old, respectively. Patients detected by screening techniques and other means were the oldest, 61.0 years of age. These findings suggest that breast self-examination was practiced among

younger women prior to the diagnosis of the malignancy but after the diagnosis, most patients practiced it on the other breast.

With the exception of a small portion (6.4 percent) of older women (average age 63.5 years) who waited for more than a year and watched the disease advance, the usual delay in seeking medical advice among older women was not observed in this study. Half of the breast cancer patients, average age of 60.4 years, consulted physicians within a month after the clinical onset. Patients who delayed from more than a month up to a year were younger.

Marital status of breast cancer patients did not appear to affect the duration before they consulted a physician. It would appear that the spouse of the "currently married" patients had not encouraged their wives to seek medical care earlier than other marital groups after the lesion was discovered.

In general, the clinical and epidemiologic features of female breast cancer in Oklahoma

City were similar to those experienced by women nationally with the exception of slightly more localized disease and more use of the standard radical mastectomy. It is doubtful that these differences alone would have contributed to the lowering of female breast cancer mortality rates in Oklahoma. □

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ATTENTION COUNTY MEDICAL SOCIETIES

All resolutions from your county medical society to be presented to the OSMA House of Delegates must be in the OSMA office no later than **30** days preceding the annual meeting. The 1980 Annual Meeting will convene May 8-10, hence deadline for receipt of your resolutions is **April 8, 1980.**

If assistance is required in writing your resolutions, please contact the OSMA executive office, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118, 405 843-9571.

A Son Speaks About a Distinguished Former Editor, Ben H. Nicholson, MD, 1904-1968

JOHN F. NICHOLSON, MD

At Columbia-Presbyterian Medical Center, you can have a building named for you if you donate the money to build it to the institution. State facilities do not generally require donations and so are named for people who contribute something other than money. Generally the something is not the offices or titles they held, but the way they held them. So it is with Dr Ben H. Nicholson. He practiced pediatrics in Oklahoma City for 37 years, was Clinical Professor of Pediatrics at the University, held important posts in the medical associations, was president of the Oklahoma City Clinic and editor of the *Journal of the Oklahoma State Medical Association*. These are the facts, but the building is named for the style and substance of the man. What I will attempt — in a sort of spiritual biography — is to explain, if I can, that style and substance.

He was born in 1904 in the town of Harri-man, in east Tennessee, but grew up in Columbia in middle Tennessee. Although we think of Tennessee as a border state, middle Tennessee is very much "Old South." It is plantation country with wooded hills, cultivated valleys and dozens of clear, fast-moving streams. In 1904 it was still agricultural, but devastated economically by the Civil War and by recon-

struction. My father's family was not well-to-do, but comfortable. He fished the streams and hunted the fields, but he also spent time with poor relatives, subsistence farmers who lived a hard life very little changed from the lives their ancestors had lived 80 years before. At fourteen he was driving a truck in his father's business during his school vacations. His early years were thus rich in experience, but his father thought he was being overly distracted and sent him to high school in the Webb School in Bellbuckle, Tennessee where Sawnee Webb had recreated the antebellum classical Southern education. There he learned Latin and Greek, struggled with trigonometry, played baseball and was subjected to the harsh discipline of Mr Webb who established clear rules for gentlemanly behavior and swift corporal punishment for transgressors.

From there to Vanderbilt for two years of premedical education. The dominant influence at the University at that time was the Fugitive movement, led by John Crowe Ransom. The Fugitives argued that the industrial age had distorted basic human values. While very Southern in their orientation, they rejected a sentimental return to "The Old South" with its caste system as firmly as they rejected the crass commercialism of the machine age.

Vanderbilt School of Medicine was very

small when he entered it. All the professors knew all the students, but more important, the students knew the professors, and the professors were extraordinary role models — always on the ward at the moment of crisis, always knowledgeable, courteous to a fault and humble with the true humility of the supremely confident. They were, in short, gifted, dedicated and disciplined. My father worked his way through medical school, was graduated in 1928 and immediately entered pediatric training. He rose to be chief resident and took up golf.

I have presented briefly the bright side of growing up educated and idealistic in the proud, intellectually renaissance south of the 1920's. There was a dark side. The patrician leadership of the old south had been discredited and replaced, in the aftermath of the Ku Klux Klan, by men who were half-educated, petty and short-sighted. Brutality against the blacks, which was vicious in the 20's, was the most obvious manifestation of a disordered and sick society. Real life had little to do with Sawnee Webb, Fugitive ideals, and professorial giants. It is not surprising then that he turned his back on the South and headed West with his new wife, who was a Minnesota Yankee, half-Irish and Roman Catholic to boot.

The land of opportunity was Oklahoma, and his new — and permanent — professional address was the Oklahoma City Clinic. One of the founders of the clinic was Dr William Rucks, Sr., father of William Rucks, Jr., who had been my father's best friend through high school, college, medical school and house staff training. The clinic was operated as a partnership in the true sense of the word, members consulting with each other freely, all committed to the practice of medicine as a service to the community as a whole. Participation in teaching at the University was encouraged as was attendance at scientific meetings. Salary was dependent on length of service, not on medical specialty or number of patients seen. It was a young idealist's dream come true. The year was 1931.

The next ten years were years of learning and gaining experience. His practice became brisk, but he never allowed himself to be rushed. With patients and everyone else he had the Southern trick of being able to put himself in another's place and thus of consider-

ing each person as an individual, irrespective of what group the person belonged to, and irrespective of whether he approved or disapproved the group.

Everyone could talk to him, and his interest in the conversation was always genuine. Sometimes talking was not easy. Once he was asked to see a boy whose mother spoke only Cherokee and whose grandmother spoke only Choctaw. The five-year-old patient, who spoke Cherokee, Choctaw and English, ended up translating between doctor and mother, doctor and grandmother, and mother and grandmother.

In the thirties doctors became very much open to new ideas. My father was no exception. Once when a nursing infant's eye infection had not responded to the usual ointment, the maid asked him, "If mother's milk is good for the inside, why isn't it good for the outside." He thought about it, looked it up in the medical literature, found nothing and prescribed breast milk, three drops in each eye with feedings. The inflammation cleared up promptly. He didn't report the case, but he learned from it. And so his reputation as a physician grew, but still he always had time for each patient — time to talk, time to communicate.

December 7, 1941, ended the idyll. During World War II Dr George Garrison and my father were the only pediatricians left in Oklahoma City. It was still the time of house calls, and they covered 400 square miles. My father held true to his commitment to the medical school, and I am told that what pediatrics was taught there during the war was taught by him. He was gone from the house before I got up in the morning and didn't return until long after I had gone to bed. On Sundays he slept in the afternoon, or if things had not been too bad, he played golf. There were a few bright moments — the brightest the Sunday when a red-headed giant, an officer in the Medical Corps, appeared at our house to cook a chicken specialty he had learned in India. All day he sweated in the kitchen with chickens, a bushel of rice and innumerable bay leaves. At dinner in the evening, with the bay leaves heavy in the air strong enough to bring tears to the eyes of the most stoic Brahmin, he presented a diaphanous shawl to my mother announcing heartily, "That's what the women in India wear all over." We had met Bielstein.

When the war ended Dr Bielstein returned to become a partner. My father and he were soon joined by J. Neill Lysaught, who was bril-

liant, charming and adventurous. He had been a paratroop surgeon during the war, volunteering for that duty to earn the extra "jump money" — he said.

The years immediately after the war were exuberant and genuine fun. Three colleagues, practicing and consulting, with mutual respect, competing as doctors will, and the old man, Dr Ben, was in his element. He also bought a share in the resurrected Twin Hills Golf and Country Club.

In those mature years he loved medicine, his wife, his children and golf. It was clear that he loved medicine best. The order of priority after that was not easy to determine, but golf was probably never less than third, and fell that low only during domestic crises. He played summer and winter, twice a week, in all kinds of weather. Golf was to him the ultimate relaxation, a leisurely discipline combining athletic ability, the subjugation of that ability to the strange, stiff-armed swing and most important, the mental concentration, excluding all outside influences. "You never really win," he said to me once. "There's always Par waiting for you at the next hole." In those years on a good day, he could shoot in the seventies. He once made a double eagle, three under par on a five par hole, and also made a hole-in-one.

The halcyon days were numbered. By the early 1950's storm clouds had begun to gather over American medicine. Medical technology had advanced rapidly during and immediately after the war, and the fruits of this new technology were being distributed by the US Public Health Service through the mechanism of funding large academic medical centers. The new centers interacted better with each other than with the doctors practicing in the community. The doctors in practice began to feel increasingly alienated from the medical schools. The other overwhelming problem was the cost of medical care. It had begun to rise inordinately, and there was talk in congress

about socialized medicine. In my father's mind the cart was getting in front of the horse, and issues that had to do with the fundamental principles of medicine as a profession were about to be settled on the basis of money alone.

As these things were evolving, he became editor of the *Journal of the Oklahoma State Medical Association*. He worked hard at this new job, trying to use the *Journal* as a means to bring the practicing doctor and the medical school closer together. He was successful in this effort and the *Journal* grew in prestige, becoming an award winner. In the editorial column, he addressed the other problem — the rising cost of medical care — and how to deal with it without surrendering basic principles. For those who longed for the good old days, he quoted from the diary of Dr Isabell Cobb who had practiced in the old territorial days. She wrote in 1896 that she had charged \$8.00 total for a number of home visits to a dying patient. His editorial comment: "Dr Bell, bless her, can have her real dollar . . . her calomel, her Blands pills, Dover's powder, her mustard plasters . . . As for me . . . I'll take . . . penicillin, the sulfa drugs, blood transfusions, good anesthesia, sterile techniques and a dollar whose value is said to be depreciated."¹

His contention was that modern medicine was more expensive primarily because it was better, and further that the American people were going to have modern medicine. The question then became: Is money how we practice medicine or is it why we practice medicine? My father viewed medical care for all the people as the primary goal of medicine, and money as necessary to accomplish that goal. Money was now the issue and it had to be put in its place — second place. The best way to reaffirm medicine's essential contract with society was for organized medicine to agree to accept, as full fee, payments for service judged fair and reasonable by both the medical societies and the community as represented by the insurance companies, notably Blue Shield. This solution was viewed as creeping socialism by much of the medical community. To my father refusal to accept the service contract raised the spectre of medicine for profit, medicine as business. He wrote:

We have traditionally cared for the poor without charge, cared for the average for an average charge and for the well-to-do for often a greater fee. Our justification for the larger fee was the *no fee*

John F. Nicholson, MD, was graduated from Vanderbilt University School of Medicine and is certified by the American Board of Pediatrics. Doctor Nicholson is presently Associate Professor of Pediatrics and Pathology at the College of Physicians and Surgeons, Columbia University. Among his medical affiliations are the American Academy of Pediatrics and the Society of Pediatric Research.

for the poor. In other words, we have been applying a tax system of our own which we deplore in government — we are reserving the right to soak the rich in order to pay for the poor. It can be called the sanctity of doctor-patient relationship or doctor-patient contract or by any other name. It still smells the same.

If the poor over 65 can pay for his own and is no longer to be cared for free, there can be no justification for maintaining a tax on the rich over 65 to provide for the poor man's care. This is the basis for and reasoning behind the service contract. It is unwillingness to accept the idea of a service contract that keeps us from offering a responsible plan that will prevent the government from taking over. When it happens, let's not blame the socialists, the pinks, the politicians, bureaucrats. Let us put the blame where it belongs, squarely on our own shoulders.²

When he left the editorship of the *Journal* in 1960, he had had his say. He was then president of the Oklahoma City Clinic and there

found problems which were corollaries of those he faced as editor. How many patients can a doctor see every day and still maintain high quality of service? How fast can a young doctor expand his practice without burning himself out intellectually? He worked hard at this job as he always did, but he was tired. He wrote to me, "I feel like resigning sometimes but then I am really not much of a quitter." When his time came, he did resign, and retired — to the full-time pediatric practice he had been carrying on all along. Just short of real retirement, he died — and so in fact he never quit.

In summary, I think my father was a Southern idealist, raised on the principles of the rights of man, on Jefferson and Jackson, who had the opportunity to grow up in a society shifting from the old farming age to the new machine age. He saw the material benefits of the new ways, but never considered them to have changed the basic relationship of man to man. He was a 20th century physician who managed to remain a 19th century doctor. □

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Oklahoma WIC Program

The Oklahoma WIC (Women, Infants, and Children) Program, a three-faceted nutrition program stressing food, nutrition education, and health care, is carried on by the Nutrition Division of the Maternal and Child Health Services.

Based on research indicating that six to seven percent of infants born have some degree of brain cell deprivation as a result of malnutrition during pregnancy or very early childhood, this program is restricted to pregnant and lactating women and children up to five years of age. These come from households having incomes less than 1.95 times that of the poverty level and who, after a physical examination, have been determined to be nutritionally at risk.

Health indices which may indicate a pregnant woman needs WIC services include anemia, history of pregnancy complications, insufficient weight gain during pregnancy and frequent infections.

Infants and children who are not thriving,



News From The Oklahoma State Department of Health

anemic or who have history of frequent infections may be placed on the program.

Nutrition education must be given to the participant a minimum of every three months and progress of the patient is followed closely.

As a result of WIC, incidents of anemia are decreasing, "failure to thrive" infants and children are improving, infections are decreasing, and general health status of the patient is being improved.

The funding for Oklahoma for Fiscal Year 1980 is approximately \$8 million, which will support a caseload of approximately 22,000 nutritionally-at-risk individuals. Presently the WIC program serves 20,000 patients in 55 counties. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR NOVEMBER, 1979

DISEASE	November 1979	November 1978	October 1979	TOTAL TO DATE	
				1979	1978
Amebiasis	1	3	1	18	30
Aseptic Meningitis	7	6	11	110	70
Brucellosis	—	2	—	2	7
Encephalitis, Infectious	2	—	2	22	19
Gonorrhea (Use Form ODH-228)	1091	1069	1412	12726	12513
Hepatitis A	26	20	23	243	311
Hepatitis B	16	8	24	143	138
Hepatitis Unspecified	14	12	26	184	179
Measles (Rubeola)	—	4	—	22	18
Meningococcal Infections	3	2	4	33	17
Pertussis	3	—	5	28	12
Rabies (animal)	22	12	22	265	176
Rocky Mountain Spotted Fever	1	—	8	60	54
Rubella	1	5	1	24	18
Rubella (congenital)	—	—	—	—	—
Salmonellosis	34	39	67	374	305
Shigellosis	48	51	38	264	341
Syphilis (Use Form ODH-228)	4	5	9	88	101
Tetanus	2	—	—	2	3
Tuberculosis	11	33	37	322	312
Tularemia	—	6	1	14	11
Typhoid Fever	—	2	—	—	5

AMA Adopts Oklahoma Resolutions

Two Oklahoma resolutions were among those adopted by the AMA House of Delegates at their recent meeting in Hawaii.

Doctor Joe Crosthwait, AMA delegate, successfully urged other delegates to pass a resolution concerning Professional Standard Review Organizations (PSROs). Crosthwait said predictions that were made when PSROs were formed in 1972 are beginning to materialize.

"Many of us said that the government would institute PSRO programs, take them over and then cut back on funding."

He also said many physicians expected the government to invade the confidentiality of patients' records. According to the Midwest City physician, government has a physical control over these programs at the expense of quality. This has encouraged misdirected criticism by the public toward the medical profession.

AMA accepted Crosthwait's recommendation that Congress be requested to grant sufficient funds for PSRO programs to operate efficiently and exempt PSROs patient records from public scrutiny.

The resolution also called for an end of PSROs unless these conditions are met.

AMA delegates also approved Oklahoma's resolution reaffirming AMA's support of the Voluntary Effort. The resolution recognized the success of the VE and called upon doctors to continue their efforts to hold down costs.

Oklahoma doctors were also involved in a newly-formed Mid-America Caucus involving representatives from six states. Doctor William Leebron, OSMA president, said he believed that communication among representatives of various states was effective. He explained that Oklahoma doctors also met with doctors from Kansas and Nebraska on two other occasions to review AMA business, and he said these meetings were extremely valuable. Leebron said the convention did not involve any radical changes because the current circumstances do not indicate a need for this type of action.

"AMA is pursuing a healthy conservative trend," he said.

Harlan Thomas, MD, AMA delegate, agrees that no outstanding changes were made at the meeting, but he anticipates future action by AMA concerning their policy on federal intervention into medicine.

Another Oklahoma delegate attending the convention was Ed Calhoon, MD, Beaver. He said AMA's most significant action at the meeting included recommendations for resolutions to help increase AMA membership. One resolution proposed that AMA return 50 percent of the fees remitted by county or state medical societies to help reduce the cost of AMA member recruitment efforts. Another proposal requested that rates be reduced for the initial year of full membership. The final resolution encourages unified membership by returning 40 percent of AMA dues collected by the first four states that adopt this program. Oklahoma would not be eligible to participate in this program because unified membership already exists.

Calhoon also commented about AMA's decision made last summer to break away from the LCCME, an accrediting body for continuing medical education. He said AMA was right to pull out of LCCME.

"We tried to work together and could not," said Calhoon. □

Amendment To Restrict FTC

An amendment restricting the Federal Trade Commission's authority over the medical, dental and legal professions is expected to be considered when the US Senate reviews their original proposal for FTC limitations.

The House voted in favor of placing restrictions on the commission in November and the Senate will also consider this same issue when it reviews S 1991.

The original Senate proposal does not include specific restrictions which would bar the FTC from exercising authority in the medical, dental and legal areas. However, Senators McClure of Idaho and Melcher of Montana will offer an amendment to S 1991 which restricts the FTC's authority within these professions.

This amendment enforces the state's original authority to govern the professions. It would also protect the traditional activities of these professional societies from federal government interference. □

OSMA Assumes Jail Project

"The need to improve health care within the Oklahoma jail system is probably second only to the physical needs of these facilities," says Lyle Kelsey, associate director of the Oklahoma State Medical Association and coordinator of OSMA's joint-jail project.

Four years ago the American Medical Association and the Law Enforcement Assistance Administration developed a program for state medical associations in order to help them provide technical assistance to local jails unable to meet national health service standards established by the AMA.

OSMA entered this year-long project with these two organizations on June 30, 1979 in an effort to improve health care delivery in Oklahoma jails and also to help decrease the number of liability suits that occur because of inadequate health care services available at jail facilities.

Kelsey said the project is designed to emphasize physician-awareness about health care problems in jails in order to reach those doctors who could have a potential interest in serving these facilities with their medical skills voluntarily or by some contract for employment. The project is also emphasizing the need for physicians to become more involved within their communities by approaching county officials especially county commissioners and influencing them to appropriate more funds to local jails.

"County commissioners generally place jails last on their list to be included in the county budget," says Kelsey.

OSMA is also encouraging hospitals to accept jail residents more willingly and approaching the nursing association, physicians assistants and other medical professionals to help with health care improvements in jails. OSMA is also available to assist jail facilities in locating sources for obtaining financial assistance.

Kelsey said during the early stages of this program OSMA mailed letters to 25 jails requesting their application to the project. He said OSMA requested the application of five jails from each of the state's quadrants and from jails in the metropolitan areas. These jails were selected to represent a cross-section of facility-types across the state according to different variables. The project advisory committee selected 10 jails from the returned applications. They are Choctaw County Jail, Hugo;

Claremore County Jail, Claremore; Cordell County Jail, Cordell; Enid County Jail, Enid; Hughes County Jail, Holdenville; Muskogee City Jail, Muskogee; Oklahoma County Jail, Oklahoma City; Pauls Valley Jail, Pauls Valley; Tulsa County Jail, Tulsa; and Woodward County Jail, Woodward.

The project advisory committee consisting of five physicians has been appointed by OSMA to coordinate the technical assistance for the project. James B. Pitts, MD, OSMA vice-president, is chairman of the committee.

Surveys for each of these institutions have been completed and the advisory committee is in the process of determining what type of action should be implemented to correct the medical deficiencies for these facilities. "The lack of having a medical authority seems to be the most prominent problem. The jails have no one to make medical decisions," Kelsey said.

Funds for the project are provided by the United States Department of Justice. Although funds are made available to OSMA for only one year, Kelsey said the medical association intends to carry the project into next year on a part-time basis for other jails if the current effort is successful. □

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OSMA Survey Team Conducts Evaluations

A survey team from the Oklahoma State Medical Association is beginning its second round of evaluations for institutions requesting accreditation of continuing education programs under Category I of the Physicians Recognition Award.

Two years ago eight institutions requested that their facilities be evaluated by the OSMA survey team which consists of three medical doctors and OSMA Associate Director, Rick Ernest.

Qualified institutions may receive one of three accreditation levels which are probation, provisional accreditation for two years and full accreditation for four years. The OSMA Board of Trustees approved the survey team's recommendation that one hospital be given full accreditation while the remaining institutions be granted two-year provisional accreditations since their CME courses were new programs.

Most of these provisional accreditations are beginning to expire. Ernest said the survey

team has already re-evaluated two institutions and they will recommend that these facilities be approved by the Board of Trustees for full accreditation.

"The main emphasis of the second survey involves careful examination of records over the two-year period and the degree of improvement in areas of previously-determined weaknesses," he said.

State medical associations obtained authority to survey institutions for CME accreditation from the Liaison Committee on Continuing Medical Education in 1977. At that time OSMA distributed questionnaires to health care institutions across the state in order for these facilities to determine if their institution met application requirements established by the American Medical Association.

Ernest said these requirements are a problem for most small institutions and that only large facilities requested to be surveyed for accreditation. He also said that qualified institutions are eligible to export CME programs to other areas of the state and that OSMA is encouraging this as a solution to this problem.

The associate director said the requirements

(Continued on Page 65)

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(Continued from Page 60)

usually preventing small institutions from applying for accreditation include the need for a full-time CME director, several specialty physicians to comprise a CME committee, budget for the program and facilities to conduct the program. □

Deaths

JOHN FLACK BURTON, MD
1897-1979

A retired, past-president of the OSMA, John Flack Burton, MD, died December 11, 1979 in Eufaula. Born in Wicklyffe, Kentucky, Dr Burton was graduated from Columbia University College of Physicians and Surgeons in 1923, and specialized in plastic surgery. In addition to his private practice in Oklahoma City he was appointed to the faculty of the University of Oklahoma College of Medicine. He served as OSMA president in 1957-58.

Doctor Burton was certified by the American Board of Plastic Surgery and a member of the American College of Surgeons. For over fifty years of service to the medical profession, Dr Burton was presented a Life Membership by the OSMA in 1973.

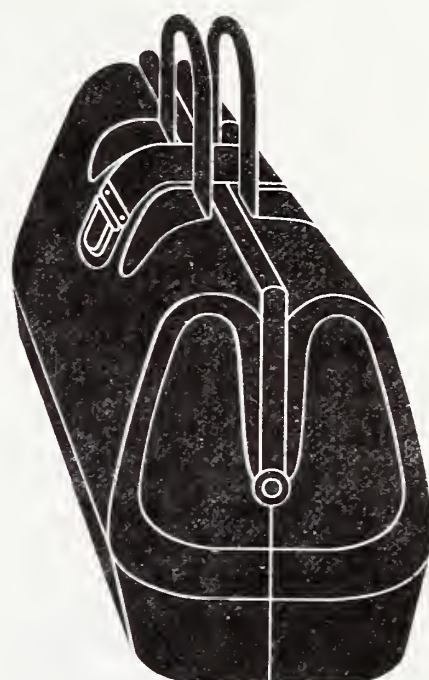
ALVIN R. JACKSON, MD
1897-1980

An Oklahoma City family physician for 37 years, Alvin R. Jackson, MD, died January 2, 1980. Born in Waxahachie, Texas, he was graduated from the University of Oklahoma College of Medicine in 1930. Doctor Jackson was a Phi Beta Kappa and a Life Member of the Oklahoma State Medical Association.

JOHN E. ROBERTS, MD
1923-1979

John E. Roberts, MD, Ada internist, died recently in Ada. The 65-year-old physician, a native of Okemah, was graduated from Northwest University Medical School in 1947. Following 24 years of service with the US Army Medical Corps, Dr Roberts established his practice in Ada. He had served as president of the Pontotoc County Medical Society and was the father of Dr Richard H. Roberts, Oklahoma City. □

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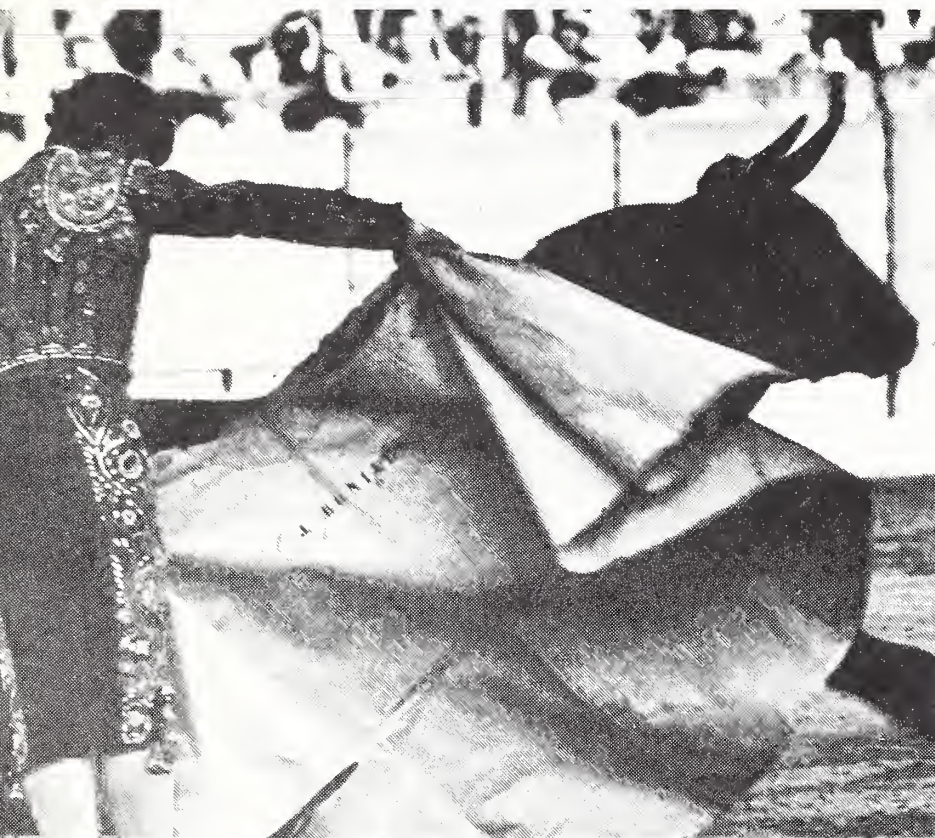
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New Physician Insurance Company Lowers 1980 Rates

Professional liability insurance premiums for Oklahoma physicians have been lowered with the formation of a physician-owned professional liability insurance company which became operational in January.

Increasing insurance rates by commercial companies encouraged the Oklahoma State Medical Association to conduct a two-year study to find an alternative to commercial companies charging increasing rates. This research indicated that the cost of establishing a physician-owned company and its premiums would be less than what has been charged by commercial carriers. In November the OSMA Council on Members Services and the OSMA Board of Trustees unanimously approved the formation of a physician-owned professional liability insurance company.

The primary purpose of forming this company is to stabilize the insurance market over an extended period of time. Participating physicians will capitalize Professional Liability Insurance Company (PLICO) by an assessment or policy fee to be paid separately to OSMA until the goal of capitalizing PLICO at \$3 million is reached. This assessment is necessary in order to meet the legal financial requirements. This figure is moderately higher than that required by law and sufficient to offer stability to the program. Although OSMA physicians and non-members will pay both an assessment and insurance premium for two or three years, the total cost is still less than rates charged by commercial carriers.

PLICO will maintain the same "occurrence type" policy that has been available to Oklahoma physicians for many years. Their policies cost more, but the coverage is much more extensive. Most other factors concerning the captive insurance company will also remain the same resulting in an easy transition for participating physicians. Moderately lower rates should be the only noticeable change for physicians in 1980, and substantial savings should result after the company is fully capitalized.

C. L. Frates and Company has been the managing general agency for OSMA's commercial professional liability programs since 1967. They will continue to function as the administrator of the new company under another management contract.

The main managing body of this new com-

pany is a 12-member Board of Directors consisting of OSMA officers, trustees, members of the Council on Members Services (insurance committee) and the OSMA executive director. □

Committee Executive Urges Physicians to Help Fight Pain

The legalization of heroin as an analgesic for medical purposes is one of several goals established by the National Committee on the Treatment of Intractable Pain.

Judith H. Quattlebaum, president and executive director of the committee urges physicians to join in the committee's campaign to wage an attack on pain by submitting comments and suggestions to help with the program.

"To begin this attack, we must see to it that our physicians no longer have their hands tied with a restricted drug armamentarium. Instead, we want you to have the flexibility of a diverse range of all effective analgesics to alleviate pain," Quattlebaum said.

The committee was created to promote education and research on more effective management and alleviation of intractable pain — particularly that which is beyond the control of available drugs and conventional techniques. Its efforts are especially directed toward pain that occurs because of incurable illness such as terminal cancer.

The committee is comprised of individuals in the medical field and other professions including legal, psychological, bioethical and religious.

Interested individuals can obtain a brochure describing this organization in more detail by writing to: National Committee on the Treatment of Intractable Pain, P.O. Box 34571, Washington, DC 20034. □

Oklahoma State Medical Association's

1980

ANNUAL MEETING

MAY 8 - 10, 1980

OKLAHOMA CITY, OKLAHOMA

Student Delegate Attends Convention in Hawaii



Jan Jones

"I was considerably enlightened about the internal structure of the American Medical Association," says Jan Jones, Oklahoma student delegate attending the recent AMA convention held in Hawaii.

Miss Jones, a second year student at the University of Oklahoma Health Sciences Center, is one of five medical student members on the American Medical Student Association's Committee on Medical Education. She said the chairman of this student committee asked her to testify before AMA's Committee on Medical Education concerning the committee's resolution on the effects of National Board Examinations on medical education in the United States. This issue was introduced by the student chairman at last

year's national convention in Chicago when he asked AMA to study these effects.

The Oklahoma student delegate said that many medical students oppose the emphasis by most medical schools on National Board Examination, not only because of the stress incurred from the tests, but because these exams seem to govern the education of a medical student.

"Many times medical schools teach students how to do well on the board examinations at the expense of learning skills which are more in tune with caring for patients. Schools want their student's national board test scores to rank high against other schools," she said.

Miss Jones said this type of emphasis is also a deterrent to an innovative curriculum. She cited an example of this situation involving the medical school at Harvard University. She said the medical school changed its curriculum in 1970 to a more modern approach. However, two years later the new curriculum was dropped because this medical school fell from their number one ranked position to the eighth position because of the National Board Test scores.

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Miss Jones testified against the AMA resolution concerning this issue in behalf of the Student Business Section, an organization created by the American Medical Student Association. She said the students are opposed to the resolution because they do not think it is strong enough. The resolution issues to schools the authority to interpret this resolution according to their own definition. Miss Jones said the students are especially opposed to the section of the resolution which states that schools can not use the board exams excessively as criteria for promotion, grading and graduation.

"Each school's definition for excessive will be different and students do not think board examinations should be used for the purpose of promotion at all," she said.

The reference committee reviewing this particular resolution passed it. Miss Jones said most medical students recognize this step as a compromise from the original intent, but she said that it has also encouraged most students.

Miss Jones also participated in a meeting of the Student Business Section which involved the discussion of the organization's internal problems. She said they reduced the number of AMSA appointees within the governing council to weaken the influence of AMSA on SBS in an attempt to gain more independence from AMSA.

"The experience of attending this convention in Hawaii was greater than all of my expectations," she said. Miss Jones also said she feels fortunate for this opportunity and that she appreciates OSMA's financial assistance. □

Past Irradiation Does Not Increase Potential for Cancer

A Pennsylvania research team has determined that irradiation treatment of an individual's head and neck performed in the past will not increase that person's potential for developing thyroid cancer.

The National Cancer Institute has requested for several years that doctors and hospitals organize programs to recall, locate and examine individuals who were given irradiation treatment when it was considered the proper procedure for inflamed tonsils and other head and neck health problems. The institute made this request because some studies seemed to have

indicated that such treatment could cause thyroid cancer even after a twenty-year interval.

Doctor Paul C. Royce, MD, Donald Guthrie Foundation for Medical Research, says thyroid cancer has developed in a few patients who received this treatment, but that thyroid cancer has also occurred among others who have never been exposed to irradiation treatment.

The foundation's research team has examined 214 people who were formerly treated by irradiation. The researchers also selected 243 people as control subjects who were never exposed to this type of treatment. The control group was also chosen to match the other group by age and sex.

Royce said benign thyroid nodules developed in several of the individuals within both groups and only three individuals acquired actual thyroid cancer. One was in the irradiated group and two were from the control group.

"Our controlled study did not find an excess number of thyroid abnormalities in previously irradiated subjects," say Royce. □

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Physician Preserves Memories of Early Indian Culture

The unique heritage of Indian culture is fading from its original form. But Dr and Mrs Harry Deupree, Oklahoma City, have captured memories from this passing lifestyle through their Indian culture collection including paintings and intricately-decorated relics hand-crafted by pioneer Indian tribesmen.

The traditional Indian's practice of medicine was based on superstition and belief in the mystical healing power of objects such as braided human hair cut from the head of a tribal enemy, sweet grass, tiny animal skins and rattlesnake tails. Among the doctor's many pieces in his collection is an early tribal medicine man's bag filled with these contents.

Other relics in the doctor's collection also reflect the imagination of these Indians inhabiting the West's early frontier. These keepsakes include clothing creatively decorated with feathers, shells and beads; blankets; weapons; tokens from the early wild west shows; and numerous miscellaneous items. Many of these relics have been carefully stored by the Deuprees. But the couple has also used pieces of this collection as decor throughout their home which has added to it the historical essence of a museum.

The obstetrician's favorite Indian relics are his 28 baby cradles representative of various tribes. Included among these cradles is one which carried the oldest son of a famous Comanche Chief, Quana Parker.

"We won't buy things that are made to sell, only those things actually used by Indians"

"I can't remember when I wasn't interested in cowboys and Indians," the physician said. When he was a youth, he gathered arrowheads, but he said his desire to really learn about the Indians and their culture began to grow after the death of his Osage Indian friend who had lived with the doctor's family during the early 1920's.

Doctor Deupree said before he and his wife were married, they began trading for pieces in



Doctor Deupree holds one of his Indian relics hand-decorated with tiny colored beads.

their collection while he was still in medical school more than forty years ago. They traded with the Cheyenne Indians living near Watonga, Geary and along the Canadian River in Oklahoma. Since that time the couple has acquired relics created by Indians of a variety of tribes throughout the state and across the nation.

The physician accumulated some of his relics during the early years of his practice when Indian patients gave him handmade tokens in payment for services. Doctor Deupree has always enjoyed having Indian patients in his practice. He said many of them have become interested in him because they heard about his personal interest in their culture. Through the years his Indian patients have offered to sell him paintings and handmade keepsakes while others have given him valuable family relics. He said one Indian girl gave him two peace pipes that are more than 100 years old. She told him these old keepsakes were much too valuable to sell and that she wanted him to protect them by adding the relics to his collection. "Most of what we have, we got from Indians," the doctor said.

Indians of the early frontier were artistic people, says Dr Deupree. Most of his Indian-made pieces are characterized by elaborately beaded designs. He counted nearly 200,000 tiny colored beads stitched into one of his cradles. "Indians had to live off the land and in my opinion this made them a creative people." In addition to using beads for decorative purposes, the physician said Indians communicated with other tribes by using colored beads which conveyed various messages.

The Deuprees have also acquired other items in their collection at Indian trading posts in Oklahoma, Arizona, and New Mexico. "We won't buy things that are made to sell, only those things actually used by Indians," the physician said.

In addition to these spared relics the couple has accumulated western art and history books and nearly one hundred paintings portraying the people and their way of life during America's early western frontier. The physician said that Fredrick Remington and Charles Russell are his favorite western artists.

Most of the couple's collection includes hand-crafted items made by others. However, Dr Deupree has also added some of his own hand-made pieces. He carves wooden Indian statues. The doctor is beginning a statue from the wood of a tree which grew near Mercy Hospital's former location. The wooden image will represent the face of an Indian medicine man carved next to another face representing a priest. The doctor plans to donate this statue to Mercy Hospital at its new location.

"I can't remember when I wasn't interested in cowboys and Indians"

Museums have often requested pieces of the Deupree collection on a loan basis. The Cowboy Hall of Fame, Oklahoma City and the Eisenhower Memorial Library, Liberal, Kansas have included the latest exhibits from this couple's collection. The doctor has also shared selected pieces of his collection and knowledge about the heritage of Indian culture by giving historical presentations to interested groups.

The doctor's appreciation for Indian culture has caused him to become more involved with the preservation of this passing heritage than by just maintaining a collection of spared relics. He is president of the Indian American Center, Oklahoma City. This organization involves individuals throughout the state including many Indians who are interested in preserving Indian heritage by locating Indian relics to be placed in the Center and conducting research for more information about the background of this heritage.

Although the heritage of Indian culture is fading from its original form, organizations such as the Indian America Center and individuals are helping to preseve the memory of this lifestyle. □

Book Reviews

CURRENT THERAPY 1977. Edited by Howard F. Conn. Philadelphia: W. B. Saunders Co., 1977, 986 pages. Price \$24.50.

To produce a book each year covering, from a therapeutic standpoint, virtually all aspects of medicine by a large number of different authors is a major challenge. Doctor Conn accepts this annually and *Current Therapy 1977* must be considered a successful undertaking. Most sections are concise and clear in outlining an understandable approach to treatment. As might be expected with multiple authors, some are unnecessarily dogmatic. However, within the limits of a book of this nature, this is not a major problem. Some sections contain brief comments on cause and diagnosis which allow better understanding of the therapeutic programs presented. The inclusion of more of these would be helpful.

This edition, as has been true of previous ones, will be helpful to physicians in many different specialties. *Harris D. Riley, Jr., MD*

Safe, Central Venous Nutrition. Guidelines for Prevention and Management of Complications. M. H. Parsa, J. M. Ferrer, and D. V. Habif. Springfield, Illinois: Charles C. Thomas, 1974, 266 pages. Price \$17.50, illustrated.

In this monograph the three authors describe their personal experiences which encompass some 400 patients who received intravenous nutrition at the Harlem Hospital Center between 1968 and 1972. Almost half of the book is devoted to description of techniques with illustrations of the introduction and positioning of central venous catheters. Later chapters on intravenous feeding and its complications are not particularly helpful. Although interesting to compare the authors' clinical experience, the book does not offer anything new nor does it provide clear guidance on the design of suitable intravenous regimens or on the all-important question of which patients should receive intravenous nutrition. *Harris D. Riley, Jr., MD*

Handbook of Clinical Drug Data. Fourth Edition. By James S. Knuben, Phillip O. Anderson, and Arthur S. Watanabe. Hamilton, Illinois: Drug Intelligence Publications, Inc., 1978, 467 pages. Price \$15.00.

New pharmacologic and therapeutic agents are introduced with considerable rapidity. Moreover, there is a constantly increasing body of information about commonly used drugs. All of this contributes to an increasing load for the practicing physician in maintaining a working knowledge of modern pharmacology. This is another summary to aid the physician in clinical therapeutics.

The design of this handbook is such that it can be carried in the pocket. The index is excellent. It is divided into two parts which cover data compilations and review of drugs. The 14 chapters of compilations treat a variety of topics pertinent to clinical management. There are tables of information on drug interactions, diseases induced by drugs, drugs and pregnancy, drugs and breast feeding, immunization and schedules of controlled drugs. Patient instructions, pharmacokinetics, adverse reactions, contraindications, and precautions are given for each agent. The references are pertinent. The primary emphasis is on the therapeutic agent itself.

The shortness and brevity of this book make it a convenient source of information in the clinic. *Harris D. Riley, Jr., MD*

Current Dermatologic Management. Second Edition. Edited by Stuart Maddin: 414 pages, illustrated, St. Louis: C. V. Mosby Co., 1975.

This comprehensive book is prepared in an encyclopedic fashion. It is divided into three major sections entitled respectively Dermatologic Procedures, Therapeutic Management, and Drug Index. In each of these sections there are short, alphabetically arranged discussions of numerous and different types of skin diseases, approaches to therapy and drugs to be used. The book is quite practical. Particularly helpful are the lists of diagnostic criteria for the various diseases. There are over 200 dermatologists from various countries who serve as contributors. It is a practical addition for dermatology offices and medical libraries. *Harris D. Riley, Jr., MD*

USAN 1975 and the USP Dictionary of Drug Names. Edited by Mary C. Griffith, et. al., 347 pages, Price \$18.50. Rockville, Md, USP Convention, Inc., 1978.

This is a fifteen-year list which is fully accumulative. It includes all (1,403) USAN listings published through June 15, 1975 and supercedes all previous USAN listings. Useful sections are those which provide information about the USAN Council, its organization procedures, makeup and principles. The book has been generally improved from previous editions and will prove useful to those who have need to look up information concerning drugs and their uses. *Harris D. Riley, Jr., MD* □

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Patients Last

Next time you drive into the parking lot at your favorite hospital, look for the parking facilities provided for patients. If you find them, you can get a good idea about the attitudes which prevail inside the hospital. If you can't find them, perhaps some changes need to be made.

Of course not many hospitals serve large numbers of transient patients who drive their own cars to hospitals for short-term visits. But, even today there are some which do serve such patients and, as more hospital-sponsored primary care clinics are developed in appropriate communities, the traffic will increase sharply.

Most emergency rooms are now serving as walk-in clinics as well as trauma centers. And many patients are referred to hospital-based physicians and other health-care professionals for a widening variety of reasons.

So where do these patients park their cars? As close to the hospital as possible — or a quarter-mile down the road? If all the closest, most convenient and most sheltered parking spaces are reserved for the non-professional administrators and bookkeepers and secretaries, and for seldom-present executives and officials, your hospital is in trouble.

Pretend, for a moment, that you are a patient, driving to the hospital where a special study is scheduled. You don't feel first-rate; you are angered by your infirmity, worried about your job, apprehensive about your diagnosis and depressed about your financial security. Finally, you find a place to park, two-hundred yards from the closest hospital entrance, but you can't go in there, it's the "emergency entrance." You're two-hundred-fifty yards from the "main entrance."

The weather is terrible; there is a light, freezing rain, the wind is gusting from the north at 30 mph and the wind chill index is exactly zero. There are patches of ice and snow over the pock-marked, irregular surface of the parking lot and the sidewalk that leads to the three steps in front of the main entrance is glazed with ice.

You button up your coat, get your cane from the back seat and . . . well, while you are struggling, you notice the car that whizzed past you and cruised into a reserved space, eighteen feet from the ground-level entrance.

The young man who slips out of the car and strides briskly toward the door is obviously in vigorous good health, about 30 years your junior and agile as a cat. You don't recognize him, even though you were a patient in the hospital for three weeks and in and out of it for the past year. He is, you decide, the administrator of the hospital. You are right. And the man who parks next to him is the assistant administrator. The next three spaces are occupied by the cars driven by the executive secretary, the assistant executive secretary, and the manager of the business office in that order.

Finally, you reach the doors of the main entrance. Of the four doors only one is unlocked. It's the last one you wrestled with. The warmth of the crowded lobby denatures some of your resentment. You begin to count your blessings. You didn't have to pay for your parking. You didn't have to negotiate those steps with crutches under your arms. Your condition must be improving; during the entire trip from the parking lot you didn't have to take a single nitroglycerine tablet and didn't have to stop once because of leg cramps.

The long line moves and you find yourself at the information desk. The young woman at the counter asks, "Whatcha need?"

"Where do I go to get this?" you reply as you hand her the slip of paper you were given by your physician last week.

"Stress-test ECG," the young woman replies, drowning the last words in a mouthful of coffee. "That's on 8B, Room 806. Go all the way down this hall. Take the elevator to the eighth floor, turn right. Give this to the woman at the desk at the very end of the corridor. Then have a seat and they'll call you when they're ready for you. Next!"

As you start toward the elevators, you begin to wonder who determines the priorities around here? Why aren't patients at least as important as doctors and nurses and administrators? Then, an exciting idea absorbs your interest. Maybe you could get into hospital administration. It's worth looking into. It's a helluva lot better than being a patient. Especially if you have to drive yourself to the hospital. *MRJ*

Opportunity

When the AMA House of Delegates convenes for its annual meeting in July, there will be 219 physicians seated to transact business for American doctors. There will be one new delegate from Oklahoma. Two other states increased their delegate strength — Texas and Missouri. That is quite an accomplishment for us. Oklahoma ranks 21st in physician population in the US, but there are only 12 states that have more representation in the House of Delegates. Oklahoma has always been a leader in AMA policy-making, but there have been times when we lost battles by narrow margins. One vote won't change the AMA, but the extra voice and vote will help.

The Higher Regents have published a provocative report on medical education in Oklahoma. The report details the substantial commitment Oklahoma citizens have made to programs that train health professionals. The cost of training a physician through residency is estimated to be \$130,000. The report speaks of "... a disturbing trend resulting from attempts by the health care industry to socialize their costs at state expense and to privatize



their revenues." That statement clearly challenges the manner in which we pay for our medical education. The report ignores the fact that the cost of post-doctoral training has historically been borne by hospital revenues collected from sick people. It has only been in the past few years that policymakers have recognized the inequity of that arrangement.

The report points out the very progressive steps taken to increase the number of residency positions but seriously challenges the expansion of the medical school's branch at Tulsa.

The disposition of the recommendations in this report will have a far-reaching effect on medical education in Oklahoma.

Someone once observed that "it's a good thing we don't get all the government we pay for." Electioneering rhetoric will increase almost daily between now and November. Responsible participation in political campaigns is the best way to preserve our private practice-free enterprise system of medicine. If you can't or won't get involved in campaigning, remember OMPAC — it's your way of joining other physicians in supporting candidates that represent your views. □

Wm. M. Leeborn, M.D.

The Diagnostic Value of Arthroscopy in Internal Derangements of the Knee

TERRENCE H. BORING, MD
WILLIAM A. GRANA, MD

During the past ten years since arthroscopy was reintroduced in our country this technique has gained acceptance as an important diagnostic adjunct in the evaluation of internal derangement of the knee.

In the 17th century William Hey Leeds first described internal derangements of the knee and shortly Brodhurst successfully treated a deranged knee by meniscectomy. Since these beginnings surgeons have been refining techniques to improve their diagnostic accuracy in the symptomatic knee joint. Attempts to confirm or correct the indirect evidence provided by physical examination have recently included the radiographic technique of arthrography and the endoscopic technique of arthroscopy. Arthrography is an indirect examination, but arthroscopy offers an opportunity to visualize pathology without performing an ar-

throtomy. Takagi¹ in 1918 was the first to examine the interior of the knee using a cystoscope on cadavers. Burman, Findelstein and Mayer² in 1931 performed endoscopic examination on all major joints of the body. However, it remained for Watnabe³ to develop the equipment and refine the technique of arthroscopy of the knee. His atlas published in 1957 and the availability of his Number 21 arthroscope brought arthroscopy into the realm of practicality for many orthopaedic surgeons.

In the early 1970's, several investigators on this continent reported their results with arthroscopy of the knee.^{4, 5, 6} It was found to be most helpful to define pathology of the menisci, to identify unsuspected tears and to rule out suspected ruptures.^{4, 6-9} Since there have been reports that meniscectomy is not a benign procedure, emphasis has been placed on certainty of diagnosis.^{10, 11} Occasionally the pathology present within a meniscus cannot be seen even at the time of arthrotomy. Arthroscopy is felt to be a technique which will add to our diagnostic accuracy and avoid the removal of a normal meniscus. In addition, other uses have been found for the procedure including the diagnosis of acute ligamentous injury of the knee,¹² and the evaluation of medico-legal

problems.¹³ Current interest centers on the development of arthroscopy as a therapeutic modality. McGinty⁸ has stated a therapeutic value for arthroscopy unaccompanied by other surgical procedures. Loose bodies have been removed using the arthroscope; osteochondritis dissecans has been visualized, drilled and pinned; and partial meniscectomy has been performed through the arthroscope.¹⁴ It is a tool still very much under development.

In spite of these possibilities, the arthroscope has not been universally accepted by orthopaedic surgeons. Arthroscopy requires an investment of time to develop the technical ability of the examiner as well as an investment of money for purchase and maintenance of the equipment. Arthroscopy adds slightly to anesthetic time for the patient. Finally the interpretation of what is visualized depends upon the experience of the arthroscopist and therefore, diagnostic errors may discourage initial attempts at the procedure.

At the University of Oklahoma Health Sciences Center the arthroscope has been used as a diagnostic tool since December, 1976. The goal was to improve our diagnostic accuracy with internal derangement of the knee prior to arthrotomy. This review of our experience with arthroscopy of the knee was undertaken with three objectives in mind:

1. To assess the diagnostic accuracy of arthroscopy for internal derangement of the knee.
2. To determine the influence of arthroscopy on the actual surgery performed.
3. To assess the results in cases of deferred surgery.

MATERIAL AND METHODS

Material for this study consisted of 178 knees in 175 patients who underwent arthroscopic examination from March 1976 to March 1978. Forty-one patients were females, 134 were males. The average age was 40.9 years with a range from 13 to 60. The senior author (WAG) performed the arthroscopic examination in all cases. The surgical procedure, if any, was carried out by members of the orthopaedic faculty in 64 cases and by members of the housestaff (under supervision) in 114.

Equipment for this study consisted of a 2.5 and 5.0 millimeter Wolfe arthroscope and a 1000 watt or 150 watt American Cystoscopic Manufacturing, Inc. light source.

The technique of arthroscopy was identical in each case. General anesthesia was obtained and the patient's extremity was prepared and draped free in the usual fashion. The end of the operating table was lowered and a bolster was placed beneath the knee so that it could be flexed to 90 degrees. An adherent plastic drape was placed on the skin. Via a lateral suprapatellar puncture, the knee joint was injected with 100 to 150cc of normal saline. A stab wound was then made one centimeter above the tibial condyles and either one centimeter medial or lateral to the patellar tendon through which the arthroscope was introduced into the knee. Additional puncture for better visualization of posterior aspects of the medial or lateral meniscus was carried out as needed. A complete examination of the interior of the knee was performed in each case. All pathology identified was recorded prior to arthrotomy and included in the operative report. If arthrotomy was indicated, the knee was painted with iodine, washed with 70 percent alcohol and new drapes applied. The findings at arthrotomy were recorded as well as the procedure performed.

All patients were followed by the members of the orthopaedic housestaff or clinical staff and results were recorded. For this review additional follow-up of symptoms as needed was obtained by telephone interview. Results were graded as improved, unchanged, and poor according to the patient's symptoms.

Terrence H. Boring, MD, was graduated from Baylor College of Medicine, Houston, in 1971. Certified by the American Board of Orthopaedic Surgery, Doctor Boring is in practice in Ponca City, Oklahoma.

A graduate of Harvard Medical School, William A. Grana, MD, has been certified by the American Board of Orthopaedic Surgery. He is associate professor at the University of Oklahoma Health Sciences Center. Among his medical affiliations are the American Orthopaedic Society for Sports Medicine, the Subcommittee on Epidemiology and Injury Prevention, the International Arthroscopy Association and the American Fracture Association.

TABLE I
CLINICAL, ARTHROSCOPIC, AND
SURGICAL DIAGNOSIS

Diagnosis	Number Clinical	Number Arthroscopic	Number Surgical
Medial Meniscal Tear	75	72	74
Lateral Meniscal Tear	32	34	36
Both Menisci Torn	9	5	5
Chondromalacia	38	70	70
Anterior Cruciate Tear	14	14	17
Suprapatellar Plica	5	5	9
Degenerative Joint Disease	5	5	6
Rheumatoid Arthritis	2	1	1
Osteochondritis Dissecans	5	5	4
Loose Body	3	2	6
Osteochondral Fracture	4	5	6
Subluxing Patella	4	2	2
Popliteal Cyst	3	0	2
Collateral Ligament Tear	2	2	2
Recurrent Synovitis	1	0	0
Other	3	3	3

RESULTS

The distribution of clinical, arthroscopic and surgical diagnoses made in each case is depicted in Table I. The clinical diagnosis was changed or added to at the time of arthroscopy in 91 (50.8%) of the cases. To compare clinical accuracy, this can be further subdivided into a change or addition to the diagnosis in 48.4 percent of the faculty's cases and 55.6 percent of the housestaff cases. As noted in Table I, the diagnosis most often missed at clinical examination and made at the time of arthroscopy was chondromalacia of the patella and/or femoral and tibial condyles. However, this diagnosis would have been made at arthrotomy on routine examination of the knee and therefore, making it with the arthroscope had no effect on the surgery performed. Clinical, arthroscopic and surgical findings correlated fairly closely in most other derangements of the knee. Overall the arthroscopic diagnosis was correct in 90.4 percent of cases. Our diagnostic accuracy with the arthroscope in meniscal lesions was 97.1 percent.

TABLE II
ARTHROSCOPIC ERRORS

Missed Diagnosis	Number
Loose Body	4
Suprapatellar Plica	4
Torn Medial Meniscus	2
Torn Lateral Meniscus	2
Torn Anterior Cruciate	3
Osteochondral Fracture	1
Chondromalacia Mild (Not severe)	1
Septic Arthritis	1
Chondromalacia Patella	2
Other	1

In fifty-eight of the cases, the plan of management based on the clinical evaluation of the patient's knee was changed by the arthroscopic examination. In thirty-three of these, arthrotomy was avoided, in three cases it was performed in error on the basis of arthroscopy, and in twenty-two, the surgical approach was altered. Therefore, a positive effect was seen in 55 (30.9%) cases.

In sixteen cases the arthroscopic diagnosis was found to be wrong at arthrotomy. These errors are presented in Table II. In three cases these errors adversely influenced the surgery by leading to an unnecessary arthrotomy. Four torn menisci were missed at arthroscopy. These were in early cases in the study and arthrotomy was performed on the basis of strongly positive clinical findings. Errors were noted to be more common at the beginning of the study and to diminish with improved skill in the technique of arthroscopy.

The clinical results of cases undergoing arthrotomy and of cases in which surgical intervention was deferred based on the findings of the arthroscopy are shown in Tables III and IV, respectively. The average follow-up of operated cases was 5.87 months with a range of 0 to 24 months and that of deferred surgery was 6.2 months with a range of 1 to 20 months.

Those cases in which arthrotomy was deferred on the basis of findings at arthroscopy require more scrutiny. Ten of 34 knees had a preoperative diagnosis of degenerative arthritis. Six of the 10 knees had the additional clinical diagnosis of a torn meniscus but this abnormality was not found at arthroscopy. Four patients underwent arthroscopy for staging of their disease to determine future therapy. As expected, none of these ten knees were improved as a result of arthroscopy. Of

TABLE III
SURGICAL FOLLOW-UP

Surgery Performed	Number	Improved	Unchanged	Worse
Medial Meniscectomy	73	58	12	3
Bilateral Meniscectomy	6	4	2	
Lateral Meniscectomy	36	34	2	
Anterior Cruciate Repair	8	6	1	
Chondroplasty	32	21	9	2
Loose Body Removal	4	3	1	
Release of Lateral Retinaculum of Quadriceps	5	3	1	1
Lysis Suprapatellar Plica	6	5	1	
Patellectomy	1		1	

TABLE IV
RESULTS OF DEFERRED SURGERY

Number	Improved	Unchanged	Worse	Unknown
34	6	23	0	5

the remaining twenty-four knees, six underwent arthroscopy for a variety of reasons: to stage the degree of chondromalacia, to look for potential internal derangement associated with a popliteal cyst or ligamentous injury, and in one case to assess the extent of injury to an anterior cruciate ligament. Three of these were improved at follow-up, and three were unchanged.

Fifteen were examined for suspected meniscal pathology without arthritis changes. None were felt to have a derangement which required surgery, but one patient later had excision of a meniscus which was considered suspect. Follow-up of the remaining knees has been difficult. Seven patients remained symptomatically unchanged, two were improved and in five the results are unknown. Follow-up in each of these five cases was terminated after a brief period either by the surgeon who felt he had no more to offer the patient, or the patient who was displeased with the negative findings.

Finally, three knees were evaluated clinically for symptoms of pain. One knee was negative for pathology and improved at five months. The other two had mild chondromalacia of the tibial condyles, not amenable to surgery, and were unchanged five months following arthroscopy.

Two knees included in this study had or developed clinical evidence of infection. One of these was a spherocentric total joint replaced in a patient with persistent pain. He underwent arthroscopy in an attempt to exclude loosening of knee components as a cause of pain. Subsequent fluid analysis demonstrated an infection present at the time of arthroscopy which was not clinically recognized. He has done well following control of the infection and arthrodesis. The other infection occurred in a patient examined for persistent symptoms following a meniscectomy performed some years in the past. His postoperative course following arthroscopy and arthrotomy was seemingly uncomplicated and he was discharged only to return in two weeks with a septic arthritis. This was successfully treated by incision, drainage and appropriate antibiotics. The knee

continues to be painful and may require arthrodesis in the future. There have been no infections in those cases in which arthroscopy was done without arthrotomy. There were no other complications seen following arthroscopy.

DISCUSSION

Surgery was avoided in thirty-three knees by use of the arthroscope. However, our results in these patients (18.5% of cases improved) do not correlate with the 86.2 percent spontaneous improvement reported by McGinty in knees in which no pathology was found or the 68.2 percent improvement in knees with pathology but no surgery.⁸ Perhaps this is a reflection of patients in different socioeconomic groups as well as among patients with varied motives. We cannot ascribe therapeutic value to arthroscopy with such certainty as McGinty does based on our results. These patients must be followed closely since long term results will reveal the ultimate value of arthroscopy.

On the other hand, we are comfortable deferring arthrotomy following negative arthroscopy results especially for suspected meniscal pathology. Our accuracy in the diagnosis of a torn meniscus was 97.1 percent, and our overall diagnostic accuracy was 90.4 percent. There was also some pathology undetected at arthroscopy. Four torn menisci, four loose bodies, and four plicas were missed at arthroscopy. The latter two groups were unsuspected clinically but were found on routine examination of the suprapatellar pouch at the time of arthrotomy. Three torn or attenuated anterior cruciate ligaments were also overlooked at arthroscopy. These results reflect the importance of a complete examination of the knee using the arthroscope.

The arthroscope is a valuable tool in our clinical setting. With it we have greatly improved our diagnostic accuracy, thereby enabling us to better plan the surgery performed and avoid missing clinically unsuspected pathology. We intend to continue to evaluate our results as well as explore new possibilities for the use of the arthroscope in the diagnosis and treatment of internal derangement of the knee. □

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OKLAHOMA STATE MEDICAL ASSOCIATION'S ANNUAL MEETING

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Aeroallergens in Tulsa, Oklahoma

CLAUDIA OWENS, AMT
LEON HOROWITZ, MD
DAVID S. HUREWITZ, MD

A comprehensive survey of aeroallergens and results of a three-year study listing the total number of times each allergen was counted each month has not been previously reported for Tulsa, Oklahoma.

INTRODUCTION

Aeroallergens for Tulsa, Oklahoma, have not been previously reported in the medical literature. In 1973 we began studying the problem and since 1976 we have systematically collected these data and have reported them to the Pollen and Mold Committee of the American Academy of Allergy for inclusion in their annual report.¹ Information has also been supplied to the media for inclusion in the weather reports in newspaper, radio and television. The Tulsa City-County Health Department includes the pollen count in their daily air pollution index reports.

MATERIALS AND METHODS

Samples were collected using the Durham sampler.² Standard microscope slides were coated with Lubriseal,^R Arthur H. Thomas Co.,

and exposed in the Durham sampler for a 24-hour period, usually 10:00 AM to 10:00 AM. Until April 1978, the sampler was on top of a building in Utica Square, approximately 50 feet above street level and since then it has been on top of our office building at 17th Place and Utica Avenue, approximately 20 feet above street level. Slides are stained with five drops of Calberla's stain and covered with a 22 x 60 mm cover slip then allowed to sit for 15 minutes. Slides were then examined microscopically at 100 X by a standard method² with pollens, molds and smuts being included in the total numerical count. Individual species were identified at 1,000 X using reference slides supplied in part by Hollister-Stier Laboratories and reference texts.^{3, 4}

RESULTS

Tables I, II, III list the number of times each pollen and spore was identified each month for the years 1976, 1977 and 1978 respectively.

DISCUSSION

Tulsa is in northeastern Oklahoma. It is a metropolitan urban city of 487,000 people. Ecologically, it is in the midst of a tall grass prairie with scattered woodland areas modified by man. There are four seasons with a relatively short winter and long, hot and usually dry summer.

While there is considerable variation in the total count for each species from year to year, there is remarkable uniformity in the months of pollination with the trees rather sharply limited to March, April and May (with the exception of elm in February, 1976). Cedar pollens are noted from October through March,

From The Allergy Clinic of Tulsa, Inc., 1727 South Utica Avenue, Tulsa, Oklahoma 74104

1976

Jan	Feb	Mar	Apr	May	Jun	Trees	July	Aug	Sept	Oct	Nov	Dec
63	107	38	10			Juniperus (Cedar)					2	35
	964	488	147	2		Ulmus (Elm)						
		53	134	11	18	Pinus (Pine)						
		5	4			Ostrya (Hop-Hornbeam)						
		7	2			Juglans (Walnut)						
		4	8			Carpinus (Beech)						
		2	20			Acer (Maple)						
			449	4		Populus (Cottonwood)						
			308	59	2	Quercus (Oak)						
			33			Robinia (Locust)						
			37			Tilia (Basswood)						
			79	58	5	Liquidambar (Sweet gum)						
			15			Acacia (Mimosa)						
			12	2		Carya (Hickory, Pecan)						
			2			Cornus (Dogwood)						
			1			Corylus (Hazelnut)						
			1			Liriodendron (Tulip Tree)						
			12			Morus (Mulberry)						
			3			Salix (Willow)						
				21		Diospyros (Persimmon)						
				2		Frazinus (Ash)						
			9	109	311	Gramineae (Grass)	52	19	15	2		

Jan	Feb	Mar	Apr	May	Jun	Molds	July	Aug	Sept	Oct	Nov	Dec
17	22	25	38	82	95	Alternaria	72	101	162	102	47	28
4	1			5	6	Helminthosporium	11	6	9			4
	2	14	5	22	26	Hormodendrum	18	14	7	9	6	2
		9	14	2	12	Epicoccum	6	7	5	2	3	4
		6		1	6	Stemphyllium	19	11	8	1	2	
			2		1	Other	4	6				
				32	23	Rust	24	44	9	16		2
					1	Smut	12					
					4	Curvularia		11	13	12		
					4	Fusarium	14		18			
						Basidiomycete		5	4			
						Leptosphaeria		1				
						Pleaspora		1				
						Weeds						
					32	Platago (English Plant)	20	2				
					3	Rhus (Sumac)						
					1	Carex (Sedge)						
						Rumex (Dock-Sorrell)	11	14				
						Amaranthus/Chenopodium	8	19	12			
						Artemeia (Sage)	4	1				
						Xanthium (Cocklebur)		4				
						Ambrosia (Ragweed)		65	889	162	2	

1977

Jan	Feb	Mar	Apr	May	Jun	Trees	July	Aug	Sept	Oct	Nov	Dec
13		29	30			Juniperus (Cedar)				11	31	13
	2	102	24	2		Populus (Cottonwood)						
		1,002	154	12	3	Ulmus (Elm)						
		1	4			Acacia (Mimosa)						
		19	2			Acer (Maple)						
		5				Carpinus (Beech)						
		4	8			Cornus (Dogwood)						
		15	12			Corylus (Hazelnut)						
		12	113	3		Liquidambar (Sweet Gum)						
		9	281	4		Morus (Mulberry)						
		2	15	3	4	Pinus (Pine)	4					

11	5	3		Ostrya (Hop-Hornbeam)										
18	1			Salix (Willow)										
15	3			Tilia (Basswood)										
	45	65		Carya (Hickory, Pecan)										
	24			Diospyros (Persimmon)										
	15	15		Fraxinus (Ash)										
	56	48		Juglans (Walnut)										
	3		1	Liriodendron (Tulip Tree)										
	50	5		Quercus (Oak)										
		2		Robinia (Locust)										
6	86	83	199	Gramineae (Grass)		37	57	19	5	3	2			

Jan	Feb	Mar	Apr	May	Jun	Molds	July	Aug	Sept	Oct	Nov	Dec
20	19	29	29	60	123	Alternaria	70	193	176	74	87	17
1	5	1	2	1	10	Epicoccum	1	3	22	7	11	2
1	5	10		8	4	Other	7	5	6		5	
	2	8	25	31	24	Hormodendrum	14	17	44	9	13	2
		1			1	Fusarium	2	32	3	4	3	1
		5	4	2	3	Helminthosporium	1	10	18	10	26	4
		6	19	13		Rust	20	57	50		38	12
			1	1		Stemphyllium	17	6	30	1	7	
			1			Polythrincium						
						Smut	31	6	28			
						Weeds						
				1	2	Rhus (Sumac)						
					28	Plantago (English Plant)	4					
					3	Rumex (Dock-Sorrell)	20	37				
						Carex (Sedge)	9					
						Iva (Marsh Elder)	5					
						Prosopsis (Mesquite)	3					
						Xanthium (Cocklebur)	2	10				
						Ambrosia (Ragweed)		166	1315	203	7	
						Amaranthus/Chenopodium		49	61		2	
						Artemisia (Sage)				13	5	

1978

Jan	Feb	Mar	Apr	May	Jun	Trees	July	Aug	Sept	Oct	Nov	Dec
10	21	167		6		Juniperus (Cedar)				9		3
		1571	184	6		Ulmus (Elm)						
		59	65	2		Populus (Cottonwood)						
		63	14	3		Quercus (Oak)						
		28	2	1		Acer (Maple)						
		12	28			Carpinus (Beech)						
		4	39	15	4	Pinus (Pine)	1					
		3	2			Cornus (Dogwood)						
			46	3		Morus (Mulberry)						
			38	4		Liquidambar (Sweet Gum)						
			38	9		Tilia (Basswood)						
			36	2		Fraxinus (Ash)						
			19			Salix (Willow)						
			12			Ostrya (Hop-Hornbeam)						
			7		8	Carya (Hickory-Pecan)						
			7	2		Juglans (Walnut)						
			4	1		Diospyros (Persimmon)						
			4			Liriodendron (Tulip Tree)						
			3			Acacia (Mimosa)						
				4		Robinia (Locust)						
				5	1	Lonicera (Honeysuckle)						
			14	56	186	Gramineae (Grass)	11	5	25	13		

Jan	Feb	Mar	Apr	May	Jun	Molds	July	Aug	Sept	Oct	Nov	Dec
18	18	5	26	49	99	Alternaria	62	392	556	203	39	32
	1				33	Epicoccum		19	1	2		12
	1	3	8	11	102	Hormodendrum	27	91	121	53	26	3
		1		2	9	Helminthosporum	17	55	34	11	8	
			2			Stemphyllium	1	32	34	24	11	
			4	2	1	Other	2	2	6	4	4	
				27	55	Rust	14		22	26	5	
					16	Smut	4			15	4	
					1	Puccinae						
						Fusarium	13	39	29	5	10	1
						Stemphyllium	1	32	34	24	11	
						Leptosphaeria	1		2	1	2	
						Basidiomycete		4				
						Pleaspra				1	1	
Weeds												
				7	4	Artemisia (Sage)		1				
				3	22	Plantago (English Plant)		1				
				1		Rhus (Sumac)						
					2	Carex (Sedge)						
					3	Prosopis (Mesquite)						
					16	Rumex	19	45	3			
						Ambrosia (Ragweed)		71	556	178		
						Amaranthus/Chenopodium		61		11		5
						Xanthium (Cocklebur)			10	1		

but we cannot determine from the slides if this is the allergenic Mountain Cedar. Many species of cedar are used decoratively in Tulsa.

The grasses run from April until frost although they fall off sharply in September. Species cannot be identified from the slides but Bermuda is the most widely planted ornamental with perennial rye a close second. Other

grasses are planted for cattle feed in the surrounding ranch areas.

A few weed pollens are found in the summer but August to frost (usually in November) is Tulsa's season for ragweed and the Amaranth/Chenopod group.

As previously reported^{5, 6} molds are found perennially with Alternaria and Hormadendrum being most common.

SUMMARY

A comprehensive survey of aeroallergens has not been previously reported for Tulsa, Oklahoma. Results are presented of a three-year study listing the total number of times each allergen was counted each month. A standard count was done using a Durham sampler.

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Acute Post-Streptococcal Glomerulonephritis, Arthritis, and Purpura

FRANCISCO LLACH, MD

CASE HISTORY

Acute post-streptococcal glomerulonephritis (APSGN) is a common entity which rarely includes dermatological and joint manifestations. The present report describes a patient with APSGN, late-developing arthritis, and purpuric rash without evidence of any other disease; thus the most likely cause of all the clinical manifestations may have been the streptococcal infection.

INTRODUCTION

Acute post-streptococcal glomerulonephritis is a well-described entity in which dermatological and rheumatological manifestations are rare. Such complications have not been well documented in the past and most current authors believe that the association of acute post-streptococcal glomerulonephritis with skin and joint involvement is usually suggestive of a super-imposed disease.¹ The present report describes a patient with acute post-streptococcal glomerulonephritis later develop-

ing arthritis and a purpuric rash without evidence of other disease process that can explain the joint and skin lesions.

A 24-year-old Caucasian male with no history of renal disease presented to the hospital with diffuse abdominal pain. Two weeks prior to admission, he had tonsilitis which resolved with penicillin therapy. Six days prior to admission, there was an onset of malaise followed by bilateral flank pain radiating to the abdomen. The patient also noticed decreased urinary volumes.

Physical examination revealed an alert male in no acute distress, complaining of mild diffuse abdominal discomfort radiating to both flanks. Blood pressures were 172/100 mm Hg (supine) and 152/108 mm Hg (sitting), pulse was 96/min and regular, respiratory rate was 22/min, and temperature was 102°F. Funduscopic findings were within normal limits. Tonsils were enlarged and hyperemic with no exudates. Lungs were clear. Examination of the heart revealed an atrial diastolic gallop and a Grade II/VI systolic ejection murmur along the left sternal border. Abdomen was distended, there were decreased bowel sounds and diffuse mild tenderness. No rebound sign was elicited. There was mild bilateral costovertebral angle tenderness. Rash and peripheral edema were not present. Neurological findings were normal.

From the Nephrology Section, Department of Medicine, University of Oklahoma Health Sciences Center and Medical Service, VA Medical Center, Oklahoma City, Oklahoma.

LABORATORY DATA

Hemoglobin, 15 gm%; hematocrit, 43%; white blood cell count, 10,000/cu mm with a normal differential. Sedimentation rate was 41 mm/hr. Urinalysis showed a rust-colored urine with a specific gravity of 1.011, pH 5, albumin 2+, blood, 3+. Microscopic examination revealed three to five white blood cells per field, 40-50 red blood cells, and numerous red blood cell casts.

Serum electrolytes were within normal limits, blood urea nitrogen was 39 mg%, creatinine 2.3 mg%, uric acid 10.9 mg%, total protein 7.1 gm%, albumin 3.0 gm%, bilirubin 0.6 mg%, creatinine phosphokinase 640 units, serum lactic dehydrogenase, serum glutamic oxaloacetic transaminase (SGOT), and serum glutamic pyruvic transaminase (SGPT) values were normal. Serum amylase and diastase values were also within the normal limits.

A 24-hour urine protein excretion was 2.8 grams; endogenous creatinine clearances were 60 ml/min; antistreptolysin (ASO) titer increased from 340 on admission to 1,920 Todd units four days later; serum complement was 55 mg% (normal range, 100-200 mg%); LE cells, latex fixation, serum antinuclear antibodies and cryoglobulins were all negative; repeated tests for serum anti-GBM antibodies were negative. Throat cultures produced normal flora, and urine and blood cultures were repeatedly negative. Chest x-ray findings were within normal limits. Electrocardiogram was normal. Plain film of the abdomen revealed a bowel pattern consistent with adynamic ileus.

HOSPITAL COURSE

The patient was placed at bedrest and maintained on intravenous fluid replacement. The abdominal ileus and pain resolved in 24 hours but fever persisted throughout the second hospital day and penicillin-G was given intravenously 600,000 units every six hours. On the third hospital day, a petechial rash was noted on the lower extremities as well as painful swelling of the right ankle. The left ankle and left wrist were also tender to palpation. Arthrocentesis was attempted but no fluid was obtained. Radiographs of the joints revealed soft tissue swelling. The rash progressed to a diffuse generalized ecchymosis. Penicillin was discontinued. On the fourth hospital day, there was progression of the joint involvement to include both knees, ankles, and elbows; joint

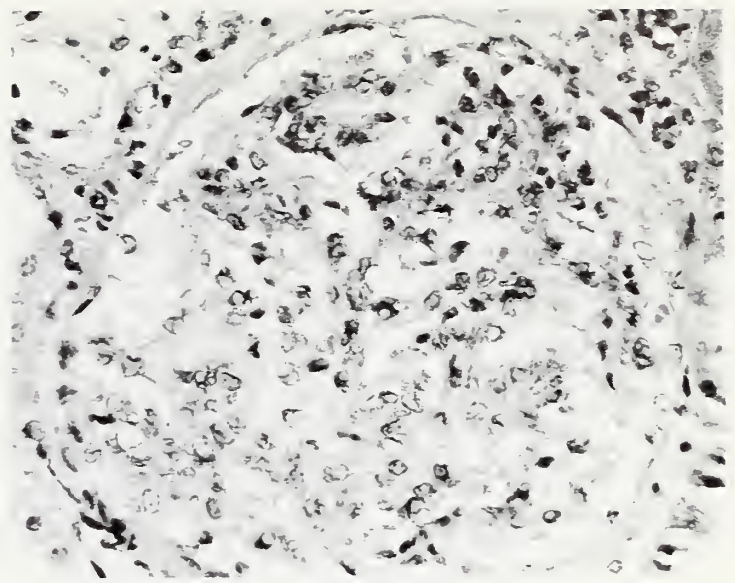


Fig 1. Light microscopy (hematoxylin-eosin stain), reveals endothelial and mesangial cell proliferation.

swelling was severe with pitting edema present below the knees as well as on the dorsum of the hands. A coagulation profile and platelet count were normal. Lymphocyte transformation test done against penicillin was negative.

On the fifth hospital day, the patient underwent renal biopsy. Light microscopy revealed diffuse proliferation of mesangial and endothelial cells. (Fig 1) Renal vessels and the interstitium were within normal limits. Immunofluorescence studies showed diffuse coarse deposition of complement but no immunoglobulin. (Fig 2) Electron microscopy revealed the presence of electron-dense deposits localized in the subepithelial side of the glomerular basement membrane. (Fig 3)

During the next four days, the arthritis resolved, but the edema and rash persisted with slow resolution during the subsequent four weeks. Antistreptolysin titer increased to 1,920 units by the fourth day and decreased gradually over the next three weeks to 150 units. Serum complement was repeatedly low in the first ten days and became normal by the

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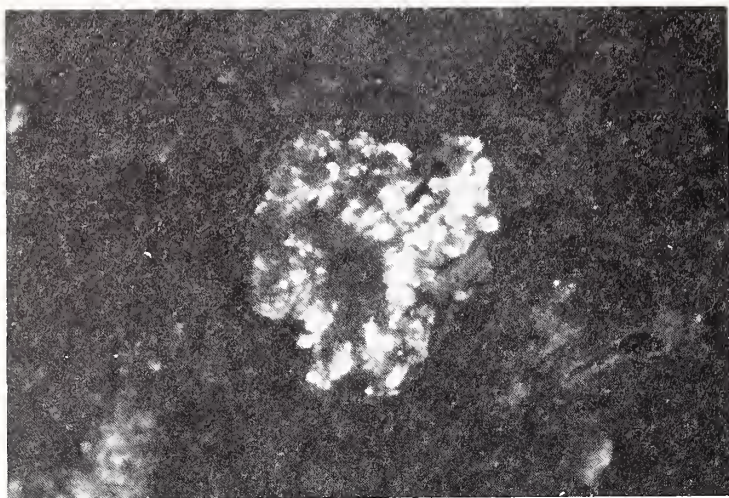


Fig 2. Immunofluorescence study shows the presence of complement deposits in a coarse granular pattern.

second week. At the time of discharge, two weeks after admission, the patient was afebrile and normotensive. The urine sediment revealed microscopic hematuria with few red blood cell casts. Serum urea nitrogen and creatinine decreased to 39 and 2.3 mg%, respectively and creatinine clearance increased to 84 ml/min.

The patient was followed in the Renal Clinic and by the third month, he was totally asymptomatic. Physical findings and urinary sediment were normal. Serum urea nitrogen was 15 mg%, creatinine 1.0 mg% and creatinine clearance 130 ml/min. He has been followed up for two years and has remained healthy with no change in renal status.

DISCUSSION

The clinical presentation of this case as well as the early course of the illness is typical for acute post-streptococcal glomerulonephritis, i.e., an episode of upper respiratory infection followed within a two week interval by acute glomerulonephritis. The increase in ASO titer as well as low serum complement are consistent with such a diagnosis. The diffuse coarse deposits of complement observed by immunofluorescent microscopy and the absence of immunoglobulin deposits, although not typical, have been described in acute post-streptococcal glomerulonephritis, especially when renal biopsy is done in the late stages of the glomerulonephritis.² The presence of subepithelial electron-dense deposits is also consistent with and rather characteristic of such a diagnosis.

However, it was on the third day of the hospital admission when the patient developed joint and skin manifestations when other entities had to be considered. Thus, Henoch Schönlein nephritis, penicillin-induced serum sickness, cryoglobulinemia, vasculitis, and rheumatic fever may all account for the clinical manifestation of the patient.

The association of acute glomerulonephritis with joint pain and a purpuric rash is very suggestive of Henoch Schönlein nephritis. However, in this disease, serum complement is always normal.³ Furthermore, the absence of IgA mesangial deposit (characteristic of the disease) by immunofluorescence is against such a diagnosis.⁴

The possibility that the acute glomerulonephritis, arthritis, and skin lesion were due to a penicillin-induced serum sickness seems remote since the lymphocyte transformation test against penicillin was negative.

Cryoglobulins have been found to be present in different pathologic conditions such as malignancies, collagen diseases, chronic liver disease, amyloidosis, myeloproliferative disorders, sarcoidosis, and rheumatoid arthritis. They all may be accompanied by arthralgia, purpuric rash and renal manifestations suggestive of glomerulitis. However, serum immunoelectrophoresis was consistently normal in our patient and repeated tests for cryoglobulins were negative.

The demonstration of normal arteries and arterioles in the renal biopsy militates against vasculitis. At the same time, the normal antinuclear antibodies titer as well as negative LE preparation argue against lupus nephritis.

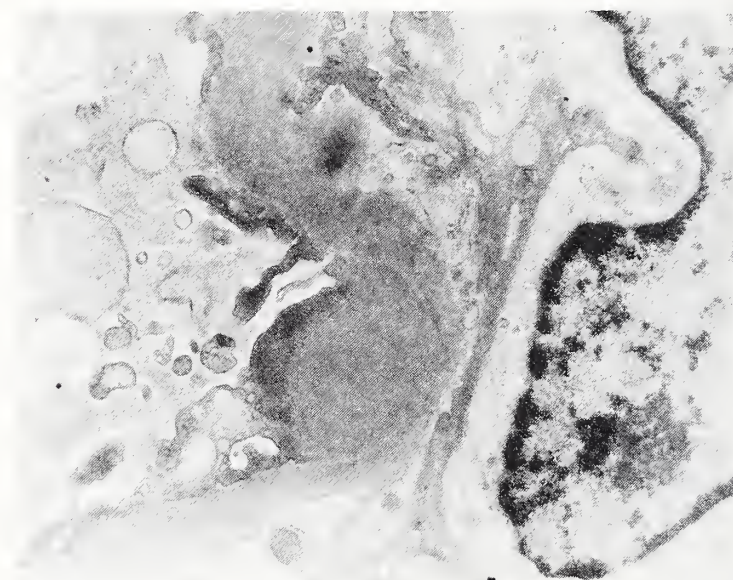


Fig 3. Electron Microscopy reveals, in the center, the presence of a large subepithelial deposit.

In summary, it is most likely that all the clinical manifestations of our patient were related to the streptococcal infection. It is suggested that the skin and joint involvement are another expression of an immune complex disease in patients with acute streptococcal infections. This association of acute arthritis with evidence of recent streptococcal infection suggests a possible role of acute rheumatic fever as the cause of acute glomerulonephritis. Although both acute post-streptococcal nephritis and rheumatic fever are produced by streptococcal infections, there is uniform agreement that the clinical association of both diseases is very rare.⁵ There are some data in regard to the renal pathological changes occurring in patients with rheumatic fever. They include light microscopy changes consistent with glomerulonephritis, similar to those observed in this patient.⁶ However, most of the cases reported had severe advanced rheumatic heart disease; serum complements were usually normal or increased and the electron-dense deposits were located in the mesangium and occasionally in the subendothelial and intramembranous position rather than in the subepithelial site. Therefore, clinically it appears unlikely that rheumatic fever was the cause of acute glomerulonephritis in this case. □

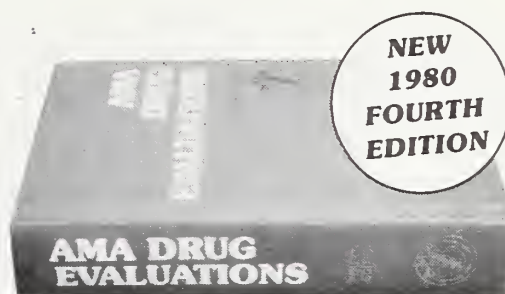
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Automobile Emission Testing Air Quality Service

The Air Quality Service of the Oklahoma State Department of Health works closely with the US Environmental Protection Agency and the local health departments throughout the State of Oklahoma in maintaining the clean air enjoyed by most of the state and in covering the air pollution levels in the metropolitan areas.

In 1979, the photochemical oxidants (primarily ozone) exceeded the National Ambient Air Quality Standards in central Oklahoma and Tulsa regions. These oxidants are formed by the combination of hydrocarbon and the oxides of nitrogen in the presence of sunlight.

The primary source is from automobile exhausts.

In order to reduce the level of photochemical oxidants, effort must be made to minimize the emission of these two pollutants from automobiles. One of the practical ways to achieve this goal is to have cars properly tuned at all times. In an effort to encourage the general public to assume their role in keeping air clean and in conserving fuel, the Oklahoma Lung Association, the Oklahoma State Department of Health, other concerned organizations, and individual volunteers sponsored an auto emission test program in the fall of 1979. Approximately 250 vehicles were tested. About 15 percent of the vehicles tested failed to meet the appropriate emission standards. This failure rate is in line with the national average.

The public response to this program was very favorable and their cooperation was sufficiently encouraging to warrant future programs. One similar emission test program is tentatively planned for early spring this year. Hopefully, this kind of program can help the State Health Department attain its goal of improving Oklahoma's environment. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR DECEMBER 1979

DISEASE	December 1979	December 1978	November 1979	TOTAL TO DATE	
				1979	1978
Amebiasis	6	—	1	24	30
Aseptic Meningitis	13	4	7	123	74
Brucellosis	—	1	—	2	8
Encephalitis, Infectious	1	1	2	23	20
Gonorrhea (Use Form ODH-228)	1028	986	1091	13754	13499
Hepatitis A	22	12	26	265	323
Hepatitis B	19	13	16	162	151
Hepatitis Unspecified	18	22	14	202	201
Measles (Rubeola)	—	1	—	22	19
Meningococcal Infections	3	2	3	40	19
Pertussis	8	—	3	36	12
Rabies (animal)	23	22	22	288	198
Rocky Mountain Spotted Fever	—	—	1	61	54
Rubella	—	—	1	24	18
Rubella (congenital)	—	—	—	—	—
Salmonellosis	34	44	28	394	349
Shigellosis	41	62	46	294	403
Syphilis (Use Form ODH-228)	6	5	4	94	106
Tetanus	—	—	2	2	3
Tuberculosis	32	34	11	354	346
Tularemia	—	4	—	14	15
Typhoid Fever	—	1	—	—	6

New Committee to Monitor Health Planning

The establishment of a liaison committee to help monitor health problems and unify health planning procedures in Oklahoma was approved by the Board of Trustees of the Oklahoma State Medical Association at their quarterly meeting in November.

The Health Planning Advisory Committee (HPAC) consists of physicians who are members of the Health Systems Agency, the State Health Coordinating Councils and sub-area councils of the HSA. Robert Perryman, MD, has been appointed to the committee as its chairman.

Rick Ernest, associate director of the Oklahoma State Medical Association, said the goals of this newly-formed committee will be to first, pool the resources of these committee members representing various health planning organizations. He said these members will discuss health problems and the particular procedures in operation and those being developed by each represented health planning organization. He said this communication should offer each of the members a better understanding of health planning activities and difficulties occurring throughout the state. Secondly, Ernest said this new committee will act as a vehicle of communication with other physicians. It will transmit updated health planning information to Oklahoma doctors through periodic publications to be issued by OSMA.

The formation of this committee has been under consideration by the Council on Members Services for nearly one year; however, the council did not wish to approve individually this committee without first recommending its approval to the Board of Trustees. The council members sought the board's approval because they anticipate the responsibilities of this particular committee overlapping areas outside the council's authority.

Ernest cited an immediate overlapping concern of the committee. The members plan to meet with other representatives from the Health Systems Agency to discuss federal regulations in order to alert physicians about updated, but often unexplained, federal action. The associate director said the committee is now reviewing federal regulations involving the new ruling on "certificate of need." The ruling requires that changes in state legislation be made to comply with the new federal regulations. HPAC is examining this ruling by re-



viewing all available information from each of the represented health planning sources. The decisions made by this committee will serve as a guide to OSMA about the changes OSMA should endorse legislatively.

Ernest said almost one-third of the state medical associations across the nation have implemented a similar committee and that they seem to be effective and very successful. He also said the members of Oklahoma's new committee are enthusiastic about combining their efforts to resolve some of the state's health planning problems. □

Corporation Offers Worldwide Ambulance Service

Sudden illness, an accident or even death can occur anytime. When these events occur while the victim is far away from home, expenses for chartering an air ambulance or commercial carrier often amount to thousands of dollars.

Several Oklahoma professionals including physicians and surgeons have recently become involved in the organization of a worldwide ambulance service known as NEAR (Nationwide/Worldwide Emergency Ambulance Return, Inc.). This new corporation is located in Oklahoma City and offers return transportation to its members from anyplace in the world.

NEAR membership is sold on an annual basis and will cover individuals for any number of trips taken during that year. Individuals are offered membership on a nationwide or worldwide scale with either single or family rates.

The costs for various NEAR memberships are: Nationwide Single Membership — \$30.00, Family — \$36.00; Worldwide Single Membership — \$42.00, Family — \$48.00.

Interested individuals may request more detailed information by contacting the NEAR headquarters at NEAR, Inc, 1900 N MacArthur, Suite 210, Oklahoma City, Oklahoma 73127, Telephone: 405 949-2500, Cable: NEAR-TWX 910 831-3203. □

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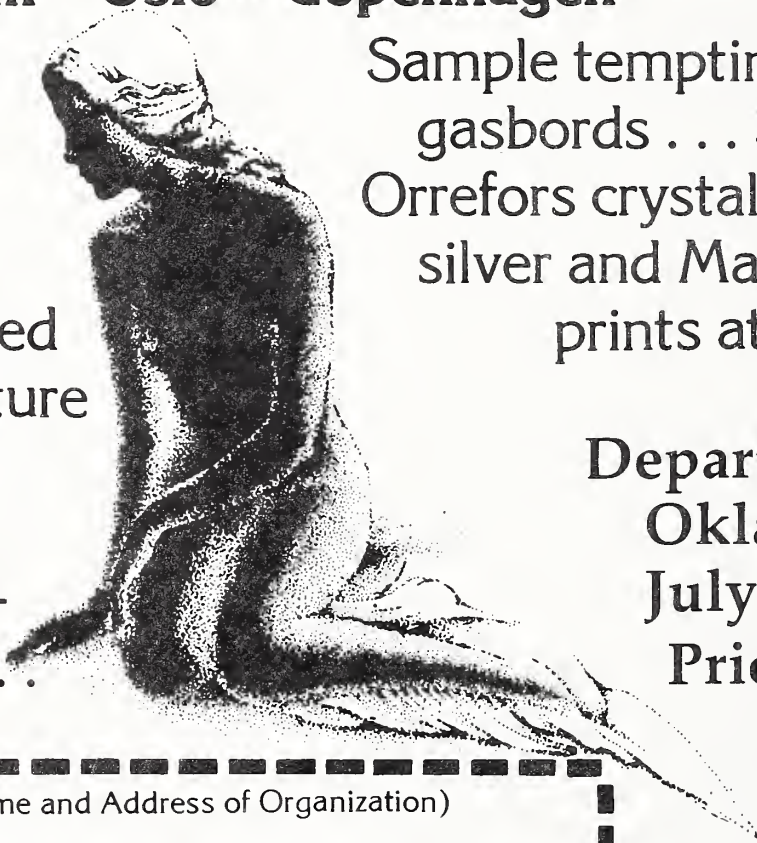
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Medicare Revision Receives Inaccurate Publicity

Inaccurate information has created widespread misunderstanding of a recent revision to the 1975 Medicare regulations involving a "waiver of liability" for Medicare beneficiaries.

James H. Sammons, MD, executive vice-president of the American Medical Association, said that newspaper articles have implied that Medicare beneficiaries do not have to pay for any service not covered by Medicare unless their doctors issue them a written notice in advance stating that the program will not pay for such service. Sammons also said that some newspaper stories said Medicare would reimburse the patient any amount and then collect that reimbursement from the doctor if he did not administer a notice to the patient.

The Medicare law passed in 1975 (Section 1879) states that when a beneficiary receives health care and a claim is submitted and paid by the program for services later determined to be medically unnecessary or custodial, patient liability for this amount, which is actually an overpayment, will be waived if the patient did not know the service was not covered under Medicare provisions.

Regulations within this law state that a patient is presumed not to know about these exclusions in the absence of evidence to the contrary. Such evidence would "include (but not be limited to)" written notices in advance from three sources: the intermediary or carrier, a utilization review committee, or the provider (hospital, skilled nursing facility, or home health agency). The law provides for alternative sources and refers to them as "other person furnishing such items or services to the individual." A written notice from one of these sources may also be issued on a similar prior claim.

The revision made in November, 1979, was made only because administrative law judges have ruled that the parenthetical phrase — (but not be limited to) — will now include an oral notice as evidence against the knowledge of a patient about possible exclusions.

The recent revision involves only one change. This revision limits the evidence used against a patient's knowledge about exclusions to written statements by the three types of sources listed in the 1975 regulations. The written notices may be in reference to the current claim or a similar prior claim.

Medicare regulations do not impose a new

obligation on physicians to reimburse payments to Medicare after patients have already paid for services. The only situations in which Medicare can require payment from physicians after patients have paid involves a regulation established in 1975. These circumstances include: (1) That the physician accept assignment on the claim; (2) That he collect from the patient some portion of his charge over and above the deductible and coinsurance; (3) That Medicare pays the claim and then finds that the service is either medically unnecessary or custodial; (4) That the physician knew the claim to be considered medically unnecessary or custodial when he filed it.

Sammons said that physicians are not even considered by the 1975 regulations as major sources to write notices because this is primarily the responsibility of intermediaries, carriers, utilization review committees and providers. Physicians are recognized in the regulations only as alternatives to providers as "other person furnishing the items or services to the individual." □

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Medical Center Offers Birth Defect Service

The Birth Defects Information System (BDIS) is a new service at Children's Medical Center in Tulsa available free of charge to interested physicians.

This computerized system contains summaries of more than 1,000 birth defects. Each summary provides minimal diagnostic criteria for a particular birth defect and other known references and experiences relating to it.

The BDIS has been installed at the expense of the Children's Medical Center and the March of Dimes Birth Defects Foundation, Tulsa chapter, to aid physicians in their understanding of birth defects. This system also helps equip the physician with an understanding of how to counsel families about preparations for potential problems that could occur with a child who has a birth defect. Doctors are requested to furnish the names and/or descriptions of the birth defects under consideration to obtain these summaries.

Burhan Say, MD, director of the Genetic Unit, said interested physicians can make inquiries by writing to Burhan Say, MD, Director, Genetics Unit; Children's Medical Center; PO Box 35648; 5306 E Skelly Drive, Tulsa, Oklahoma 74135. Although Burhan prefers to receive inquiries by letter, he said telephone inquiries can be made at 918 664-6600, extensions 268, 269 and 385. □

OSMA Recognizes Both Accrediting Organizations

The American Medical Association's split from the Liaison Committee on Continuing Medical Education has caused concern among many physicians about whether this action will jeopardize their Continuing Medical Education (CME) efforts.

The Oklahoma State Medical Association has decided to meet the requirements of both organizations to safeguard all continuing medical education activities of Oklahoma physicians.

At this time AMA possesses the only complete set of records verifying Category I credits awarded to physicians by both of these accrediting organizations. When AMA decided to no longer recognize the Liaison Committee on

Continuing Medical Education (LCCME) the records were retained by AMA. LCCME was left without any verification of the credits it issued to facilities which have offered CME programs to participating doctors.

LCCME has now requested that OSMA and other state medical associations send them the names of all institutions and organizations which have been accredited by LCCME to help them reestablish their own set of records. OSMA has submitted this information in order to protect CME credits earned by Oklahoma doctors.

A spokesman from LCCME said they would also offer accreditation to Oklahoma facilities previously accredited only by AMA.

OSMA has submitted the information requested by LCCME in an attempt to save all CME endeavors made by doctors in Oklahoma.

"Our concern deals mainly with the fact that both organizations are continuing to accredit organizations and institutions separately, and we fear that the loser in such a struggle could be the individual practicing physician who is attempting to satisfy his CME requirements. We hope to avoid this problem in Oklahoma by supporting both organizations," an OSMA spokesman said. □

Researchers Study Child Deaths

Approximately 2,000 children between the ages of one and fourteen die in automobile accidents each year. Maryland researchers have determined in a study that seat belts and child restraints are effective in protecting children in automobile accidents.

The researchers evaluated 89 deaths of children under 15 years of age who were killed in motor vehicle accidents in Maryland. Only three of those children were wearing seat belts or a restraint device. The researchers decided that in most of these cases the child's life could have been saved by the use of proper equipment.

Two researchers agreed that helmets would also be a prudent safety precaution for children riding in an automobile. "The likelihood of the widespread use of helmets is probably remote. But of greater value would be using seat belts already in automobiles," said one of the researchers.

The report also indicated that seat belts are unused by four of five drivers and even when the driver is buckled in, the child beside him often is not restrained. □

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OSMA Releases TV Spot Announcements

"In less than three years the Oklahoma State Medical Association has received more than \$200,000 worth of free air time on television and has spent less than \$9,000 for the production of public service announcements," says Richard Hess, associate executive director of the Oklahoma State Medical Association.

The production of public service announcements is one of several responsibilities supervised by the Council on Professional and Public Relations. Recently, it has begun production of two more announcements.

One announcement will urge the public to aid in the voluntary effort to contain health care costs by avoiding various attitudes. Such attitudes frequently promote careless medical spending. This includes the belief that "insurance will pay for it," "hospitals can be used for a short vacation," and "emergency rooms can be substituted for a personal physician." The other announcement will encourage people without a personal physician to contact their county or state medical association for assistance in locating a family doctor.

Hess said other major responsibilities super-

vised by the council include coordinating daily media relations and organizing the publicity and promotional materials for the OSMA Annual Meeting. He said the council is currently involved in monitoring developments in the area of physician-advertising. The council initiated this activity after the Federal Trade Commission passed a ruling favoring physician advertising in October. Immediately following this event the council sponsored a press conference conducted at the OSMA headquarters in Oklahoma City. Dr Joe Crosthwait, chairman of the council, responded to the ruling on behalf of Oklahoma physicians.

Crosthwait said OSMA has never prevented new doctors from advertising pertinent information such as medical background, hours and basic fees. But he said the FTC ruling could open an opportunity for "hucksters" to participate in false and misleading advertising.

OSMA does not agree that this ruling is in the best interest of the public. The association opposes the physician-advertising ruling because it promotes patient-solicitation and because it could encourage deceptive advertising. The ruling restricts OSMA's ability to establish ethical standards for its members and prevents OSMA from guarding against patient-solicitation. □

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**National Cancer Institute
To Conduct Laetrile Tests**

The National Cancer Institute has obtained conditional approval from the Food and Drug Administration to conduct a clinical trial of laetrile on human beings.

The clinical trial will be preceded by a test on rabbits and then a three-month toxicity study on six human patients. If these tests indicate that laetrile usage is safe for humans, the institute will organize a full clinical trial involving nearly 300 volunteer advance-cancer patients.

The Mayo Clinic, University of California (Los Angeles), University of Arizona and Memorial Sloan-Kettering Cancer Institute have also agreed to participate in research during the trial. Research for this particular trial is expected to continue for one year.

"The AMA is pleased that laetrile will be given a thorough, impartial and critical evaluation by an independent agency that is well-qualified and known for its scientific excellence," says James H. Sammons, MD, AMA executive vice-president. ☐

Miscellaneous Advertisements

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Worth Repeating

The editorial reprinted here was published originally in the January, 1951 issue of The Journal of the Oklahoma State Medical Association. In spite of efforts to identify its author, the one who deserves the credit for these words remains anonymous. If any of our readers know who wrote this gem of wisdom we will be pleased and grateful to hear from you.

It is true: There is nothing new under the sun and too often the eloquence of earlier description surpasses all later notes of rediscovery. This is a superb example. I wish I had written it. MRJ

Random Remarks on the Chronically Ill and the Chronologically Senile

These two groups merge significantly at that unjust, enigmatic, retirement age. It may profit us to ponder the fact that much of the world's important work is done by the chronically ill and that a considerable degree of the world's constructive thinking is evolved in the minds of men who have passed the accepted retirement age. When Ralph Waldo Emerson said, "Give me health and a day and I will make the pomp of emperors ridiculous," he did not know he would surpass the pomp of emperors without ever having a healthy day.

The present interest in the chronically ill is worthy of our best efforts but it will help put many people across the retirement age line who otherwise might have fallen by the way-

side. This fact coupled with a high birth rate, the saving of life in infancy and the fostering of health in adolescence is posing an old age population problem which must have serious consideration. This takes on added significance when we consider continued soil depletion and the resulting limitations in the production of food and other necessities of life.

This ever-increasing population with the productive span of life being limited by child labor laws at one end and the senseless chronological age retirement at the other, places a heavy strain on the productive age group. Even the mechanization of labor and industry cannot wholly counteract this burden.

Apparently little attention has been given to the fact that since the retirement age was fixed, longevity has increased 18 or 20 years. What are people who are now relatively young after reaching the retirement age going to do with 20 added years on their hands? Now that we live so much longer with more protection against chronic illness the time of retirement should be reconsidered and it should be based upon biological instead of chronological age. Should not the medical profession insist that something be done for the chronically idle while planning a program for the chronically ill. Employment for the idle will help hold down the population of the ill. Enforced idleness is devastating to both soul and body and subsidy for those who are able to work is only a sop that insults the highminded, intrigues the indolent and cures nothing. Good citizens want soul security not social security. They want social satisfactions with self respect.

From Hand To Hand . . .

. . . the greeting flows. The words of the poet suggest much meaning. We, as physicians, have always extended a hand to alleviate suffering and restore health. To maintain our own high standards and to protect our patients we are organized into the Oklahoma State Medical Association. The strength of the Association is dependent on many hands which includes the passage of the presidency each year.



In May, 1979, Marvin Margo placed into my hands the presidency with a quiet, "good luck." Marvin had a splendidly successful year. For the coming year it will be a privilege to pass the presidency into the hands of Floyd Miller. As president-elect Floyd has already revealed great ability for this position.

This presidential year has been busy. Many changes have been attempted to contain health care and limit personal choice in the freedom of the physician-patient relationship. Originated by those outside of the profession most of these changes have not come to fruition. Our organization monitors and stays active in local, state and national levels.

Some events that have occurred this year are

particularly worthy of notice. In January, 1980 we started PLICO, a professional liability company for more than 3,000 Oklahoma physicians. In February, 1980 at the AMA National Leadership Conference, we were one of three States to be honored, "for exceeding its AMA membership record for the seventh consecutive year." This now entitles us to a fourth delegate to the AMA. It is significant that our State physician-population ranks twenty-first, but there are only twelve other states which have more delegate representatives than we do!

Much of the OSMA "load" is carried by our office and executive staff. They help uphold our standards. It has been a year of especially hard work for them. There have been some changes and some additions. David Bickham has been outstanding as our "Chief Executive." His experience, knowledge and ability have helped us solve innumerable problems.

In a personal note, there is no way to ameliorate the sorrow of the loss of a beloved helpmate. Your sympathetic compassion has enriched this year of the presidency beyond expression. I am grateful to each of you for your help. It is a special enrichment to have 3,000 friends as we progress, From Hand To Hand

Wm. M. Leebron, M.D.

Potential Hazards of the Medical Administration of Cocaine

BERTRAM E. SEARS, MD

Reactions to medically administered cocaine still occur with significant frequency and severity and there appear to be a variety of factors involved in their occurrence.

Cocaine (benzoylmethylecgonine), the alkaloid extract of species of *Erythroxylon* trees of Peru and Bolivia, was introduced into clinical use as the first local anesthetic in 1884. Its toxic effects have now been well documented.¹ The toxicity of cocaine was highlighted as early as 1924 when a special committee was authorized and funded by the American Medical Association to collect and study information on the occurrence of accidents from the use of local anesthetics.² In the reports analyzed by the Committee for the Study of Toxic Effects of Local Anesthetics 26 of 40 local-anesthetic-related deaths involved the use of cocaine.

Toxicity reactions from medically administered cocaine continue to be a problem. A survey of plastic surgeons reported in 1976³ indicated that in 108,032 operations with cocaine surgeons had observed 646 mild reactions, 34 severe reactions and five fatalities. A 1977 survey of 2,240 otolaryngologists⁴ revealed

that 492 had observed reactions varying from hyperexcitability and diaphoresis to convulsions and respiratory arrest. Fifteen fatalities were included.

In its 1924 analysis the Committee for the Study of Toxic Effects of Local Anesthetics discerned relationships between routes of administration, concurrent administration of epinephrine and drug dosage as factors in cocaine toxicity. It recommended against the submucous or subcutaneous injection of cocaine and condemned "unreservedly" the use of cocaine paste ("mud") which consists of cocaine powder moistened with epinephrine solution.⁵

It appears that the recommendation against submucous or subcutaneous injection was generally heeded as literature indicates that the principal route of administration since that time has been by topical application. The condemnation of the concomitant administration of epinephrine appears not to have been universally accepted as evidenced by recommendations made in some textbooks of the past decade^{6,7} and through recent requests made of the author to allow its use during general anesthesia. The continued practice of administering cocaine and epinephrine in combination is open to serious question.

Cocaine may be unequalled as a local anesthetic in its ability to produce local vasoconstriction.⁸ There appears to be no objective evidence that the addition of epinephrine in

any manner enhances that effect and considerable evidence of potential harm from its use.

It is the purpose of this paper to stress the significance of some of the earlier observations relating to cocaine toxicity and to review more recently identified interactions, the knowledge of which might help to prevent serious complications from the administration of cocaine.

The role of exogenous epinephrine in the potentiation of cocaine toxicity was clarified by Muscholl in 1961.⁹ Muscholl demonstrated in pithed rats that cocaine prevents the uptake of exogenously administered catecholamine at adrenergic nerve terminals. It could be anticipated that this reduced uptake would lead to exaggeration of the catecholamine action on adrenergic effector sites. An increased incidence of arrhythmias has been observed in animals receiving the combination of cocaine and exogenous epinephrine¹⁰ and deaths in man have been attributed to this synergistic effect.¹¹

The effects of systemic absorption of cocaine from various sites of administration have also been studied. Campbell and Adriani¹² observed rapid peaks in the blood levels and toxic effects following intravenous administration of a bolus of cocaine. Only slightly less rapid and less marked elevations were noted following topical application to the trachea and pharynx. Measurable blood levels were also recorded following the application of cocaine to skin disrupted by abrasion or third degree burns. Drug levels following subcutaneous administration were detectable but not measurable in their study and no blood levels were demonstrated after instillation into the stomach, the esophagus or the bladder. It has been noted elsewhere, however, that systemic toxicity may occur following urethral injection¹³ or the oral ingestion of a large amount of cocaine¹⁴ and that absorption may occur from an in-

flamed bladder.¹⁵ Prolonged plasma levels have also been documented following intranasal application.¹⁶ In light of the finding of no measurable blood levels of cocaine by Campbell and Adriani following subcutaneous administration it seems probable that some of the toxic reactions recorded by the Committee for the Study of Toxic Effects of Local Anesthetics resulted from inadvertent intravascular injection. It is also noteworthy that in a report of 15 cocaine-related deaths reported by Johns and Henderson seven were related to the instillation of cocaine in the tracheobronchial tree.¹⁷

The dose of cocaine which can be safely administered appears to be a subject of some dispute. Fatality from a dose as small as 20 mg has been reported but is suspected to have resulted from idiosyncrasy.¹⁸ The most frequently quoted maximum adult dose is 200 mg.^{19, 20, 21} However, in the survey of Johns and Henderson six of fifteen deaths were associated with a dose of 200 mg or less. The maximal single dose recommended in AMA Drug Evaluations²² is 1 mg/kg of body weight. This source also advises against concentrations greater than 4% although Campbell and Adriani have shown that blood drug levels are a function of the total dose and not the concentration of the drug used. These investigators have also stressed the importance of fractional application to avoid high peak blood levels.

Because of its effect in reducing catecholamine uptake at adrenergic nerve terminals cocaine would be expected to interact with other drugs which modify the synthesis, uptake, release and actions of norepinephrine at adrenergic nerve terminals. Smith²³ has proposed that a history of therapy with certain of these drugs be considered a contraindication to the use of cocaine.

Drugs which cause depletion of norepinephrine increase the sensitivity of adrenergic receptors to exogenous and endogenous catecholamines. Methyldopa, reserpine and guanethidine therefore predispose to augmented sympathetic activity from circulating catecholamines whose uptake might be blocked by cocaine. Death has in fact been reported following the use of cocaine in a patient who had received guanethidine.²⁴

Augmentation of sympathetic response is also caused by drugs which cause accumulation of norepinephrine in tissues. Monoamine oxidase inhibitors, tricyclic antidepressants and chlorpromazine act in this fashion and the

Bertram E. Sears, MD, was graduated from Meharry Medical College in 1958. Certified by the American Board of Anesthesiology, Dr Sears is Professor of Anesthesiology and Adjunct Professor of Cardiorespiratory Science at the University of Oklahoma Health Sciences center. Among his medical affiliations are the American Society of Anesthesiologists and the Oklahoma Society of Anesthesiologists.

use of cocaine in their presence should be expected to produce a heightened sympathetic response.

Likewise, enhancement of the response from central and peripheral acting sympathomimetics such as amphetamine or ephedrine would be expected from concurrent administration of cocaine.

Fortunately, drugs which block adrenergic receptors such as phentolamine (alpha adrenergic blocker) or propranolol (beta adrenergic blocker) may be helpful in the treatment of cocaine toxicity reactions.

Several investigators have studied the effects of cocaine during general anesthesia.

Orr and Jones²⁵ observed serious cardiac arrhythmias associated with topical cocaineization and laryngoscopy in patients under sedation with thiopental but less hazardous responses were observed by other investigators during anesthesia with hydrocarbon and halogenated hydrocarbon anesthetics.

Evangelou and Adriani²⁶ did not observe significant arrhythmias in 27 patients who received 100 mg each of 4% cocaine into endotracheal tubes under cyclopropane anesthesia.

Anderton and Nassar²⁷ instilled 20 to 50 mg of cocaine by nasal spray in 45 patients under halothane-nitrous oxide anesthesia without serious cardiovascular changes.

Chung and his co-workers²⁸ administered 160 mg of 4% cocaine endotracheally to 20 patients under halothane-nitrous oxide anesthesia and to 13 patients under enflurane-nitrous oxide anesthesia. Two patients developed premature ventricular contractions, three developed premature auricular contractions and one developed nodal rhythm. None of the arrhythmias lasted over five minutes or required treatment.

Considering the notoriety of the combination of cocaine and epinephrine it is not surprising that there are no valid controlled studies of its effect during general anesthesia in man. In dogs, however, fatal arrhythmias have been induced under cyclopropane anesthesia²⁹ and the minimal arrhythmic dose of epinephrine has been reduced by as much as 50 percent during halothane-nitrous oxide anesthesia³⁰ when both drugs were used in the same subject.

There are certain patients whose constitutional status may dictate against the use of cocaine. It is recommended in AMA Drug Evaluations that "cocaine should be used with

extreme caution, if at all, in patients with hypertension, severe cardiovascular disease or thyrotoxicosis." It has been suggested elsewhere that individuals with atypical serum cholinesterase may have difficulty metabolizing cocaine and may be at greater risk for a toxic reaction when it is administered.³¹

The potential hazards of cocaine administration have now been sufficiently publicized that to ignore them is at least imprudent. Successful litigation for the plaintiff has been recorded following a death attributed to a combination of topical "cocaine mud," injected local lidocaine anesthesia with excessive concentration of epinephrine and additional sensitization to catecholamines by halogenated hydrocarbon anesthesia.³² Regarding this judgement the poignant observation has been made that "it would appear, despite the fact that according to the medical literature the use of "cocaine mud" on the nasal mucosa is contraindicated, that it is not until the economic impact of a professional negligence law suit occurs that many practitioners give serious consideration to abolishing its use."³³ Perhaps a repeat of such an occurrence can be avoided by a healthy respect for the inherent toxicity of cocaine and a cautious concern for its interaction with certain drugs and disease states. □

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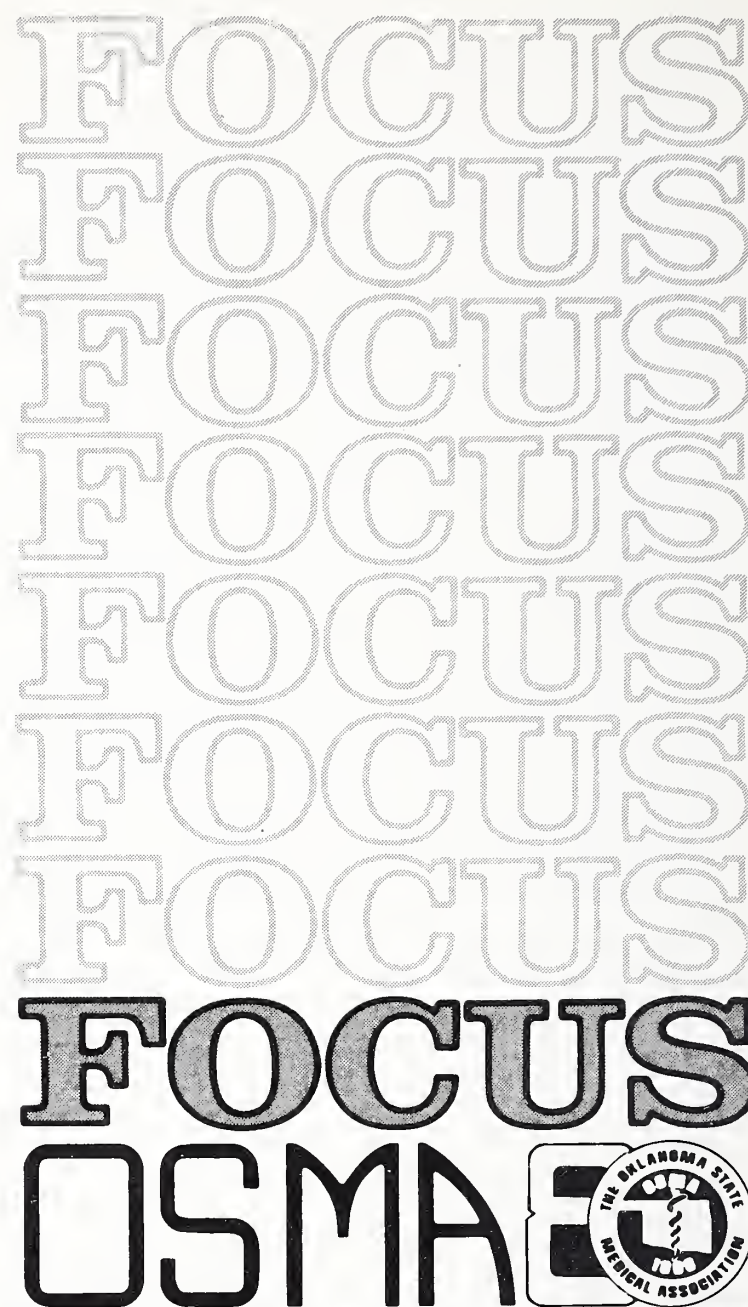
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The Physician's Role in Sex Counseling

JOHNNY B. ROY, MD, FACS

Sorting folklore from facts can help answer many questions about sex.

Sexual problems are frequently encountered in clinical practice and often go unrecognized by the physician. Whether by choice or not, the sexual revolution is upon us. Clinicians by nature of their work are called upon to render advice on sexual matters and patients take it for granted that they are the repository of sexual knowledge. Sex has been ignored as though it were not an intricate part of our daily lives. Human sexuality wasn't taught in medical schools when we were there nor were we exposed to any lectures on the subject during our post-doctoral training. With the sexual revolution, the demand for qualified therapists far exceeds the available supply; hence quackery is thriving in this area. It behooves us as professionals to be knowledgeable enough to deal with sexual problems at least at an evaluation or brief counseling level. The more we become acquainted with these problems, the more we are able to recognize what we can and cannot

handle. Objective information on the subject can be found readily in appropriate literature. We all handle some psychiatric problems in our practice and know when to refer a patient to a psychiatrist. The same can apply when dealing with a sexual problem. In general, most patients don't have a profoundly complex dysfunction warranting referral to a sex therapist.¹ A compassionate, sympathetic physician can succeed in helping these individuals.

I concur with Amelar and associates² that eliciting a sexual history demands the utmost skill in tact, sympathy and understanding. A physician willing to listen may unravel the reason for the patient's symptoms. The patient might present with non-specific symptoms partially related to sexual problems—perhaps with the hope that the physician will be able to pick up the clues—only to discover that the opportunity is lost. What compounds the problem is the embarrassment and denial inherent in personal self-esteem. Burnap and Golden³ found that when the sex-function history was routine history, significant sexual problems were discovered in 50% of patients, whereas when part of the sexual history was omitted, less than 10% of existing sexual problems were discovered.

With increasing longevity of their patients, physicians are going to encounter many more older patients. Age should not be construed as incompatible with healthy sexual desires and

attitudes. Older patients seek and welcome treatment of their sexual dysfunctions. Reports from nursing homes reveal that old men are interested in sexual indulgences, much to the dismay and surprise of nursing home personnel.⁴ Kinsey reported that 75% of 70-year-old men are sexually potent.⁵ It is we who attempt to sentence old men to sexless lives. We deprive them of privacy and discourage mingling of sexes. They, in turn, reluctantly accept their fate. They are told to behave in a manner commensurate with their age. We label them "dirty old men."

A professional and sympathetic attitude is usually taken by physicians when inquiring about the characteristics of the urinary stream, or size and color of the stool, yet when patients discuss their sexual difficulties a feeling of uneasiness prevails. Impotence following surgery for benign prostatic hyperplasia is reported to be between 16-to-30%.^{6, 7} This complication is so frequent that knowledge of it contributes to the mental anguish of the afflicted individual. Perhaps out of frustration, some might submit to surgery as an excuse to terminate sex. Zohar and associates⁸ in emphasizing this point, reported that of seven patients who received pre-operative education, not one suffered impotence following prostate surgery. Of eight patients who were not counseled, five became impotent.

We physicians must effectively inform our anxious patients and avoid making discourag-

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ing and indifferent remarks regarding sexual impotence following prostate surgery. According to Masters⁹ when a person starts to have doubts about his ability to perform sexually, he is on his way to impotence.

A candid exchange of views and information between the physician and the patient regarding such matters as premature ejaculation, various degrees of impotency, ejaculatory incompetence, masturbation, intercourse during pregnancy, and oral-genital sex can be very helpful; it is here that we can sort folklore from facts and relieve many patients' anxieties. Patients with heart problems should not be subjected to the unwarranted frustration of sexual abstinence as an additional stress. If a cardiac patient can climb one or two flights of stairs without distress, that person is able to perform sexually without hazard. However, cardiac patients should be warned that extra-marital sexual adventures *are* hazardous to their health.¹⁰ The average heart rate during coitus is 117 which is less than the rate achieved during a heated argument.¹

In conclusion, we are not asked to change our attitudes, personal preferences or moral values, but by being cognizant of our own values we are better equipped to render sound, non-judgemental and valid counsel to some of our distraught patients. □

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Pancreatic Ascites

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Pathogenesis, diagnosis and treatment of pancreatic ascites has been greatly enlightened in recent years, allowing differentiation from other forms of ascites and more specific forms of treatment.

Leakage of pancreatic secretions into the peritoneal cavity can produce massive ascites. Although approximately one-hundred cases of pancreatic ascites have been reported, the condition is almost certainly more common than the literature would suggest. Because pancreatic ascites usually occurs in patients who are heavy users of alcohol, ascites is often ascribed to liver disease. This discussion of the diagnosis and treatment of pancreatic ascites includes two case reports.

CASE REPORT #1

A 66-year-old black man was admitted to Presbyterian Hospital in the Oklahoma Health Sciences Center on 9-27-78 with complaints of

several months weight loss, abdominal pain, nausea and vomiting. The patient had lost over 40 pounds weight. He admitted to the daily consumption of one-half pint of alcohol. His abdominal girth had increased markedly during the previous three months. Physical examination revealed an acutely ill male with a massively distended abdomen. There was marked muscle wasting in all extremities. Stool guaiac was positive. Hemoglobin was 8 gm% and hematocrit was 25.9%. Serum amylase was 734 IU/dl. Ascitic fluid removed by paracentesis revealed a protein of 3.2 gm% and amylase of 9,650 IU/dl. Liver function tests were normal. Radiographic examination at the upper-gastrointestinal tract was unsuccessful because the patient repeatedly vomited the ingested barium. Sonography showed only ascites and the liver scan pattern was consistent with diffuse hepatic disease. Endoscopic retrograde cholangiopancreatography (ERCP) was unsuccessful. An acute pulmonary embolus, necessitating treatment with heparin, delayed the institution of intravenous total parenteral nutrition (TPN). After one week of TPN, the central catheter became occluded. The patient declined all medical therapy and requested an operation to relieve his ascites.

On 11-1-78, he underwent abdominal exploration. After drainage of 12 liters of ascitic fluid, an apparent abscess, eight cm in diameter, was found in the head of the pancreas. Cultures of the fluid were sterile. The tail of the pancreas was disrupted near the ligament of

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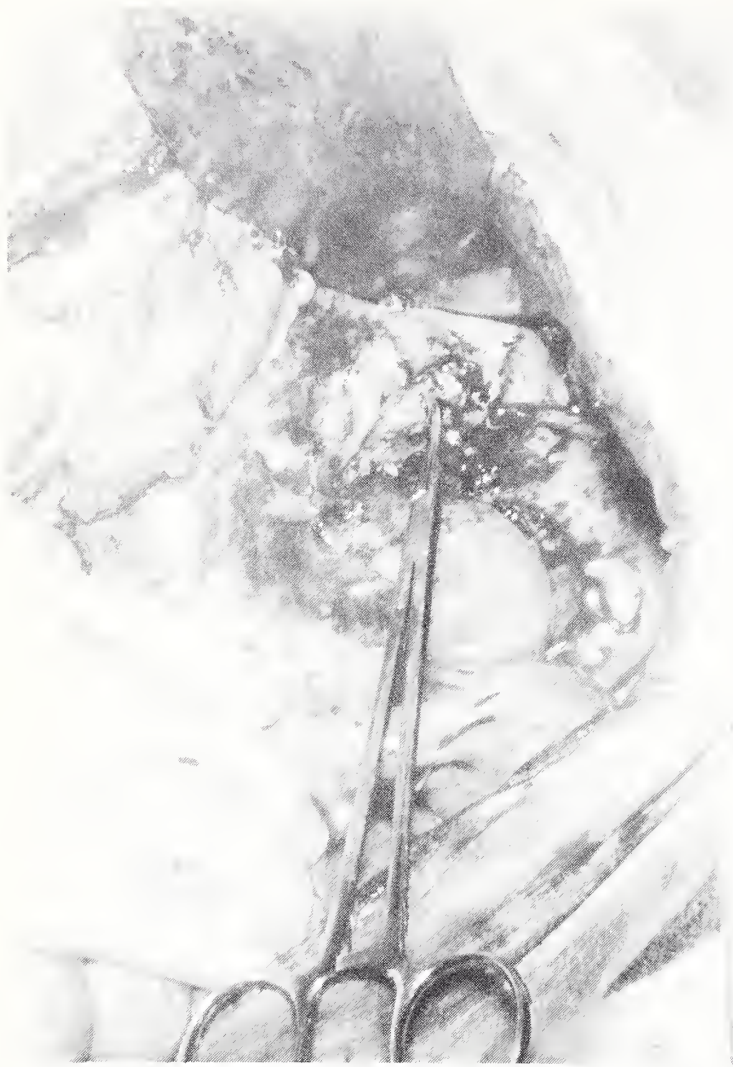


Figure 1—The clamp points to the rupture of the tail of the pancreas just above the ligament of Treitz. The colon is behind the retractor shown at the top.

Treitz at the base of the mesocolon. (Fig 1) This friable area of pancreas was draining clear fluid. Cholangiography, done through the gallbladder, revealed no abnormalities. Rather than subject the patient to a duodenotomy or to prolong the operation by attempts to cannulate the friable ductal tear, pancreatography was omitted. A Roux-en-Y loop of jejunum was sutured to the indurated mesocolon to internally drain the pancreatic rupture. The cavity in the head of the pancreas was drained externally since it was assumed to be infected. A Moretz clip was placed across the vena cava below the renal veins to obviate the use of anticoagulants in the postoperative period. Postoperatively the patient was slow to improve, requiring tube feedings. He was discharged on the 19th postoperative day but returned to the hospital briefly for nutritional support in December, 1978. Five-and-one-half months post-

operatively, the patient had resumed normal activities, gained 48 pounds and was free of abdominal complaints.

CASE REPORT #2

A 50-year-old white man was admitted to a community hospital with a two-month history of abdominal swelling and discomfort. He had been a heavy drinker of alcohol but was gainfully employed and considered himself to be in good health until the onset of symptoms. Initially he was assumed to have cirrhosis, but liver chemistries were normal. Paracentesis revealed ascitic fluid with an amylase of 15,800 Somogyi units/dl and 2.93 gm% of protein. Ultrasound examination of the abdomen showed no evidence of pseudocyst. Efforts to perform ERCP were unsuccessful. A diagnosis of pancreatic ascites was made and the patient was managed medically. He became weaker, with loss of muscle mass, and the ascites reaccumulated over a six-week period, and the patient was referred to the University Hospital in the Oklahoma Health Sciences Center.

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Figure 2—Chest x-ray of Patient #2 after initial thoracentesis.

Physical examination revealed a cachectic 50-year-old white male unable to lie flat because of dyspnea. There was marked abdominal distention. Neck veins were also distended. No abdominal masses could be palpated. There was moderate edema of both ankles and feet. Laboratory studies revealed normal serum electrolytes, BUN, creatinine and liver function tests. Serum amylase was 950 Somogyi units/dl (normal, 50-200 Somogyi units/dl). Chest x-ray demonstrated a massive right pleural effusion. (Fig 2) Thoracentesis yielded 2,200 cc of serous fluid with an amylase of 58,000 Somogyi units/dl and a protein of 2.7 gm/dl. Because of rapid reaccumulation of pleural fluid, a chest tube was inserted and a large quantity of it was removed. Abdominal distention lessened after the pleural drainage. Total parenteral nutrition through a central venous catheter was begun shortly after admission and laparotomy was performed one week thereafter. At operation, two liters of fluid were aspirated from the peritoneal cavity

and a biopsy of the slightly nodular liver was done. When no obvious pancreatic rupture was seen, operative pancreatography was performed through a duodenotomy and revealed a rupture of the proximal pancreatic duct into a three cm peripancreatic cavity. This cavity had ruptured into the peritoneal cavity in the region of the foramen of Winslow. (Fig 3) Dissection in this region resulted in the demonstration of a communication between this cavity and the pancreatic ductal system. (Fig 4) The jejunum was then divided approximately 20 cm below the ligament of Treitz and the distal end of the jejunum was carefully anastomosed to the rim of the peripancreatic cavity at the superior border of the pancreas. Intestinal continuity was established by anastomosing the proximal end of the jejunum to the side of the Roux-en-Y limb 15 cm distal to the pancreatic-jejunal anastomosis. The postoperative course was uncomplicated. Liver tissue obtained by biopsy showed no evidence of cirrhosis. Five months later the patient had gained weight.



Figure 3—Operative cholangiogram. Patient #2, showing ductal rupture at about midpoint with extravasation of dye into the peritoneal space.



Figure 4—Operative photograph of Patient #2. The smaller probe is passing through the irregular-shaped "pseudocyst" and into the pancreatic ductal system. Forceps are retracting peripancreatic tissue.

was normally active and had no recurrence of ascites.

DISCUSSION

The typical manifestations of pancreatic ascites include massive, chronic, progressive and painless ascites. This process occurs most frequently in males past the fourth decade of life, but has been reported in patients of both sexes over a wide age span. Muscle wasting, especially of the shoulder girdle and extremities, is common. Subcutaneous nodules are sometimes seen and represent fat necrosis. In the Johns Hopkins series,¹ only 4 of 27 patients had experienced abdominal pain. One-third of patients with pancreatic ascites have pleural effusions which represent a retroperitoneal tracking of pancreatic fluid into the thorax.^{2, 8} Such a connection evidently existed in Case #2. Patients with pancreatic pleural fluid

often present little to suggest intra-abdominal pathology. In Sankaran and Walt's series,⁸ 15% of all pseudocysts had concomitant pancreatic ascites. Alcoholism is present in up to 82% of reported cases.¹

The cause of pancreatic ascites is rupture of the pancreatic duct or of a pseudocyst. The latter is slightly more common. It was formerly thought that blocked lymphatics were responsible for this ascites. Most episodes of rupture occur without acute pancreatitis. Indeed, this lack of inflammation is probably responsible for the failure of the rupture to seal off. Blunt or penetrating trauma, especially in children, may result in ductal rupture and pancreatic ascites.⁷ Surgical trauma may also result in this condition.¹ Only one case of pancreatic cancer has been reported to cause pancreatic ascites.³

The differential diagnosis primarily involves cirrhosis. Since one-third of patients with cirrhosis have pancreatic disease, the diagnosis may be missed.⁶ Undoubtedly, a large number of patients with pancreatic ascites are managed as though they had cirrhotic ascites. Intraperitoneal carcinomatosis, tuberculous peritonitis, constrictive pericarditis, nephrosis, congestive heart failure and the Budd-Chiari syndrome may also be confused with pancreatic ascites.

The diagnosis is established by measuring ascitic fluid amylase and protein. The amylase is always elevated, usually strikingly so. Ascitic fluid from cirrhotic patients has a normal amylase value, and protein content is consistently over 2.0 gm%. The value of ascitic-fluid lipase as an aid in diagnosis has been championed, but it is difficult to see how this will improve the diagnostic yield since almost every case has elevated ascitic-fluid lipase.⁹ The serum amylase is frequently elevated although some patients in Donowitz's series⁴ had normal values. Cytologic studies should be done; however, in Cameron's series,¹ there were two false positives. Amylase may cause distortion or metaplasia of the cells in the fluid.

TREATMENT

According to Cameron, the initial treatment is medical and should be continued for two-to-three weeks, although Munoz recommends eight weeks and Donowitz recommends two to three months.^{1, 2, 4, 6} This therapy includes ap-

appropriate parenteral fluid and electrolyte replacement and continuous nasogastric suction. Acetazolamide (Diamox) and atropine have been used to decrease pancreatic secretions, but they are not of proven value. Nutrition is important and TPN has been an invaluable aid in the management of these patients. Thoracentesis and paracentesis have been helpful in speeding resolution of fluid. Almost one-half the patients were cured with medical therapy in Cameron's series. The mortality for medical management is 20-25% and this probably represents the poor condition of patients rather than the dangers of medical therapy.^{1, 4}

Before surgical treatment is considered, endoscopic retrograde cholangiopancreatography should be done. This should delineate pancreatic ductal anatomy and allow planning a rational surgical approach. If endoscopic pancreatography is unsuccessful, operative pancreatography should be done. Without appropriate knowledge of the ductal system, more than one-half of operative procedures will fail.¹ With knowledge of the ductal systems, success is assured in the great majority of cases.

For those patients who do not respond to or cannot tolerate medical therapy, operative intervention is indicated. The abdominal approach should be used even when pleural fluid is present. With adequate knowledge of the ductal systems, the ruptured duct or cyst may be drained internally with a Roux-en-Y jejunostomy or through the stomach or duodenum. Resection of the distal pancreas may be done in conjunction with appropriate internal drainage if no rupture of the duct is found. Patients with thoracic pancreatic fluid

fare better than those with pancreatic ascites alone.¹ The operation is successful in 90% of patients reported.¹ Low-dose irradiation has been reported to be successful but should be reserved for patients in whom operation is contraindicated.⁵ The irradiation apparently decreases pancreatic secretions temporarily and allows the ruptured duct or pseudocyst to seal.

SUMMARY

If more patients with pancreatic ascites are to be diagnosed and successfully treated, all patients with ascites must undergo diagnostic paracentesis and the amounts of amylase and protein in the ascitic and pleural fluids should be determined. Recognition of this condition leads to highly successful medical and surgical therapy. □

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Oklahoma's Neurosurgical Heritage

ALVIN RIX, MD

*Factual and anecdotal presentation of
the pioneering days of neurosurgery
in Oklahoma.*

Approximately eighty percent of the people of Oklahoma in 1931 lived in small towns or on farms. Rural electricity existed largely in the future, along with four-lane highways and indoor plumbing. The Great Depression had already arrived and the Dust Bowl was waiting in the wings. Oklahoma City, the state capital and major urban center, boasted of a population of 185,319. As new oil fields opened throughout the area, oil prices dropped to fifteen cents a barrel and unemployment figures jumped to record highs with each passing month. It was not the best of times.

Although Alfalfa Bill Murray failed to give out much bread during the early thirties, he did provide Oklahomans with plenty of circus. When not calling out the National Guard to close a bridge across the Red River or to collect receipts from admissions to University of Oklahoma football games, the self-styled champion of the poor carried on a vendetta against

higher education. In addition to firing a number of "red professors" at state colleges and universities, Murray forced the resignation of Dr LeRoy Long, who had served as Dean of the Medical School for sixteen years. Another example of his interference came via an executive order stipulating that a chiropractor be allowed to treat patients at University Hospital.

Such was the setting in September 1931 when Dr Harry Wilkins arrived in Oklahoma City from St Louis in a Dodge car described by Dr Robert Watson as "high enough off the ground for a razorback hog to run under and not scrape a hair." Harry Wilkins was graduated from Mena High School in Arkansas a few years before his friend Bob Watson who later became the first neurosurgeon in Arkansas. That same high school also produced the comedy team of Lum and Abner, of radio and movie fame. Dr Wilkins was graduated from the University of Oklahoma School of Medicine in 1927 and interned in Kansas City before starting a three-year fellowship in neurosurgery under the famous Dr Ernest Sachs in St Louis. Therefore, when he returned to Oklahoma City in 1931, he was no stranger to the state and its many problems. He accepted an appointment as Associate Professor of Surgery at his alma mater and was appointed to the staff of University Hospitals and several other local hospitals.

Initially, he was not overwhelmed with work. However, within a month he would perform an operation for trigeminal neuralgia, drain a subdural hematoma and repair a depressed skull fracture in a single day. All three patients lived, which was a novelty because

prior to that time, brain surgery carried a fifty percent mortality.

Before Dr Wilkins' arrival in Oklahoma forty-nine years ago, general surgeons with little or no formal training in neurosurgery usually repaired depressed skull fractures and occasionally did an intracranial tumor as best they could. If their patient could tolerate the trip, they often sent more important cases to Dr Sachs in St Louis or Dr Frank Teachenor in Kansas City.

Most often, brain tumor was diagnosed by the triad of symptoms of headache, vomiting and blindness. In case of doubt as to the diagnosis, a trial of anti-syphilitic treatment was often given to see if that would cure the symptoms before resorting to dangerous surgery.

In the 1930s, depressed skull fracture caused by blows from hard objects or kicks by horses were fairly common. People likewise suffered more from brain abscesses than from brain tumors. In the absence of antibiotics, abscesses and osteomyelitis of the skull frequently developed from sinus and mastoid infection and improperly treated compound skull fractures. Problems of the spinal cord and vertebrae sometimes could be corrected by surgery. For spinal localization, the injection of one cc of Lipiodol could be used. It was not expedient to employ a larger amount because the thick media could not be aspirated. Pantopaque did not become available for intraspinal diagnosis until after World War II.

Early day neurosurgeons often treated convulsive seizures in the absence of interest by other specialists. Removal of a vaso-astral scar would sometimes help the problems secondary to osteomyelitis, brain abscess, or old compound fractures. Bromides and phenobarbital represented the only anti-seizure drugs available until Dilantin came on the market in 1940. Other anti-convulsants arrived some twenty years or more later. To stop status epilepticus, light chloroform anesthesia was often a life-saving measure. This recalls the problem of General Leonard Wood, one of the heroes of the Spanish-American War and the construction of the Panama Canal. The General developed occasional Jacksonian seizures and always carried a can of chloroform so that in event of an impending attack he could partially chloroform himself to prevent the seizure from becoming a major convulsion. Subsequently, he consulted Dr Harvey Cushing, Chief Surgeon at Johns Hopkins University.

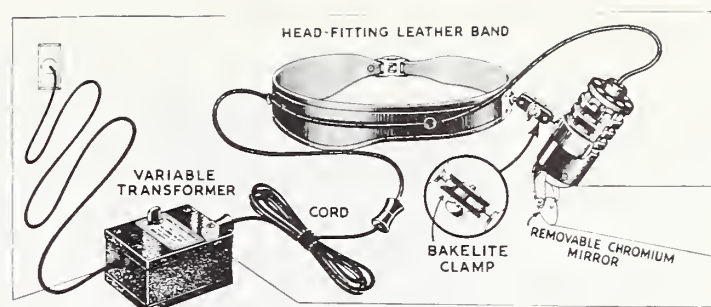


Figure 1

Good illumination while working in the deep hole has always been essential in neurosurgery and this demonstrates one of the early day headlights. The bulb in the light was an auto-headlight bulb. (From Sachs, Ernest: *The care of the neurosurgical patient*, St Louis, 1945, The C. V. Mosby Co.)

Cushing proposed operation to look for a tumor, found and removed a benign meningioma. All of Cushing's prior operations on intracranial meningiomas had resulted in fatalities. General Wood made a complete recovery and became Commander of Ground Forces in the United States during World War I. Subsequently, he went to the 1920 Republican National Convention with the largest number of pledged delegates. However because of deals in smoke-filled rooms, Warren Gabriel Harding became the Republican nominee and General Wood went on to become Governor-General of the Philippines.

Adrenal steroids and mannitol to ease intracranial pressure were not available many years ago, although fifty percent glucose proved helpful in certain temporary situations. Also, a saturated solution of magnesium sulfate used every four hours as a retention enema would frequently tide a patient over for as long as forty-eight hours. By then the rectum generally would no longer tolerate the

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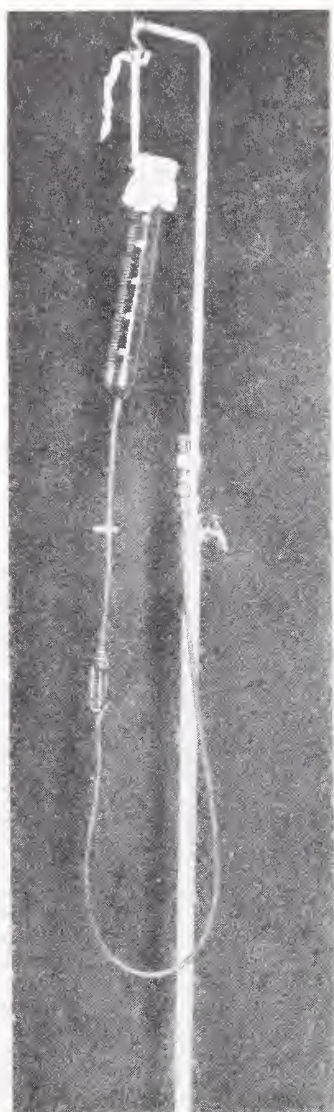


Figure 2

In the early 1930's, IV's and blood transfusions were given through an apparatus of this type. Blood was poured in through the gauze at the top so the gauze could strain out any clots still in the blood. The tubing was of rubber and after frequent autoclaving pyrogens were deposited in the tubing, giving rise to chills and fever, even though the solutions were sterile. (*From Sachs, Ernest: The care of the neurosurgical patient, St Louis, 1945, The C. V. Mosby Co.*)

drug and fortunately the resulting proctitis prevented the patient from developing magnesium intoxication. Hemostasis represented a major problem before the development of the Bovie, or electrocautery unit. Silver clips on brain arteries or perhaps a small ligature or crushed muscle sometimes helped stop hemorrhages.

The University Hospital acquired a Bovie unit soon after Dr Wilkins' arrival. Later, he purchased a portable cautery unit which, along with a suitcase of instruments, enabled him to perform operations at hospitals throughout the state. If a patient was too sick to move, doctors from as far away as Amarillo, Tulsa, Poteau,

Muskogee, Enid, Shattuck, Ardmore, and other area cities and towns would summon Wilkins for consultation and possible surgery. In later years, visiting neurosurgeons accustomed to operating at well-equipped hospitals marvelled at the relatively small number of instruments this pioneer neurosurgeon used for craniotomies.

Doctor Wilkins found an able assistant in Peggy Swanson, who accompanied him on all professional trips to outlying hospitals. He trained her as the first neurosurgical nurse in Oklahoma and for many years she remained at his side in the operating room. Incidentally, Miss Swanson's brother Homer studied under Wilkins and today is a practicing neurosurgeon in Atlanta, Georgia. As the work load increased during World War II, Jessie Jenkins joined the team as a second neurosurgical nurse and continued in that capacity on a 24-hour call basis until retiring in 1972.

Cutting the fifth cranial nerve for pain relief in Tic Douloureux formerly resulted (in approximately fifteen percent of the cases) in facial paralysis due to traction on the seventh cranial nerve. Because some patients postponed surgery too long, Wilkins devised the transdural approach method which practically eliminated chances of facial paralysis. His series of thirteen consecutive operations for brain abscesses without a death rivaled the record established by Dr W. MacEwen in Scotland in 1893.

Soon after his return to Oklahoma as the state's first neurosurgeon in 1933, Dr Wilkins was invited to become a member of the Harvey Cushing Society, currently known as the American Association of Neurological Surgeons. Seventeen years later, association members elected him vice-president of this prestigious organization and its president in 1954. In spite of his renown and heavy work load, Dr Wilkins was never too busy to teach.

When Dr Jess D. Herrmann was a medical resident at St Anthony's Hospital in 1932-33, he wished to learn more about neurology. Accordingly, he began examining all the neurosurgical patients, and since most of the interns did not wish to participate in long neurosurgery operations, he assisted Dr Wilkins at surgery. This unofficial association gradually led to a formal preceptorship. To gain necessary knowledge in neuro-pathology, Dr Herrmann spent six months in Chicago in 1934-35, in the laboratory of Dr Percival

Bailey at the University of Chicago and Billings Memorial Hospital.

It was during these years that Dr Herrmann described "Herrmann's sign." This involved a patient with an obvious intracranial tumor but no localizing signs. Frontal lobe tumors often produce a change in the patient's personal tidiness. One day Dr Herrmann entered a hospital room, found the patient voiding in a wicker waste basket and correctly localized the tumor as involving the frontal lobe. Dr Wilkins and Dr Herrmann continued working together and a formal partnership was established in 1936. Thereafter, Wilkins and Herrmann became almost the same as one name.

Extra efforts were carried out to avoid wound infection, for in those days there were no antibiotics. Interrupted silk sutures were a novelty to this area. After skin stitches had been put in, thin rectangles of German silver foil were placed over the wound because it was felt this inhibited staph infections. In operative cases with a cranial bone flap or depressed skull fractures, a head roll of gauze was applied after surgery, followed by a roll of moist crinoline. The starch in the crinoline then dried and shrank to form a snug, protective helmet, almost like a thin plaster cast. The following ritual was adhered to for many years: except for cerebellar wounds, the scalp stitches were all removed in 24 hours, and head roll and crinoline replaced. Then, five days post-operatively, stitches were removed from cerebellar wounds and for all wounds a layer of Vaseline was placed over the glistening silver foil at the incision site. Twenty-four hours later the area was cleansed with benzene and a very light bandage applied. After three months most of these scalp wounds were not visible on cursory inspection.

For poor-risk patients and for ventriculograms (except in children), neurosurgeons used local anesthesia. Sometimes this was augmented by rectal Avertin (tri-bromethyl alcohol). Ether increased intracranial pressure severely, as did the early techniques of endotracheal intubation. For many years after World War II intracranial surgery in Oklahoma City was carried out with local anesthetic in the skin incision area, augmented by ½% Pentothal drip anesthesia without endotracheal tube and with no respiratory problems. When Dr Wilkins first started doing thoraco-lumbar sympathectomies, he carried out the procedure with ether anesthesia with-

out endotracheal tube, and if a little pneumothorax developed near the end of the procedure, he would aspirate the air out of the chest with a 50 cc syringe and a catheter, and the patients got along quite well.

Local anesthesia was used frequently during Wilkins' training in St Louis under Dr Sachs, a very temperamental prima donna type. One day while Dr Sachs was doing a difficult operation under local anesthesia bleeding became quite a problem. This, and several other minor annoyances finally culminated into a major crisis for Dr Sachs. To vent his frustrations, he loudly blurted out: "Dr Wilkins, if you don't help me, this patient is going to bleed to death!" There was silence for about ten seconds until the patient's weak voice from underneath the drapes called out, "Please, Dr Wilkins, please help Dr Sachs!"

Cerebral localization of tumors created major problems for early neurosurgeons. The neurologist would localize the tumor by neurological examination and come to the operating room to show the surgeon where to make his incision. Because of false localizing signs or in cases of early tumor not producing all of the necessary signs, fairly often the tumor would not be discovered at surgery. During the days of World War I, Dr Walter Dandy at Johns Hopkins Hospital was making rounds with general surgeons and commented upon an abdominal diagnostic problem that perhaps introduction of air into the abdominal cavity would help make a diagnosis. One of the general surgeons scoffed and said, "well, you might as well put air in the brain!" This remark prompted Dr Dandy to introduce air into an infant's ventricle and obtain an x-ray — the first ventriculogram.

Following this pioneer step, air study (ventriculogram or pneumoencephalogram) could be utilized to determine displacement or enlargement of the ventricles and this, combined with neurological examination, markedly improved the percentage of cases that allowed a tumor to be successfully operated upon. (Figure 3 illustrates some of the general principles in ventriculogram carried out in an adult). Now, with brain scans and other supplemental studies such as arteriograms, ventricular air or contrast study often is not needed but it may still prove invaluable in cases of intraventricular tumor or stenosis of the Aqueduct of Sylvius.

Surgery for ruptured lumbar discs arrived

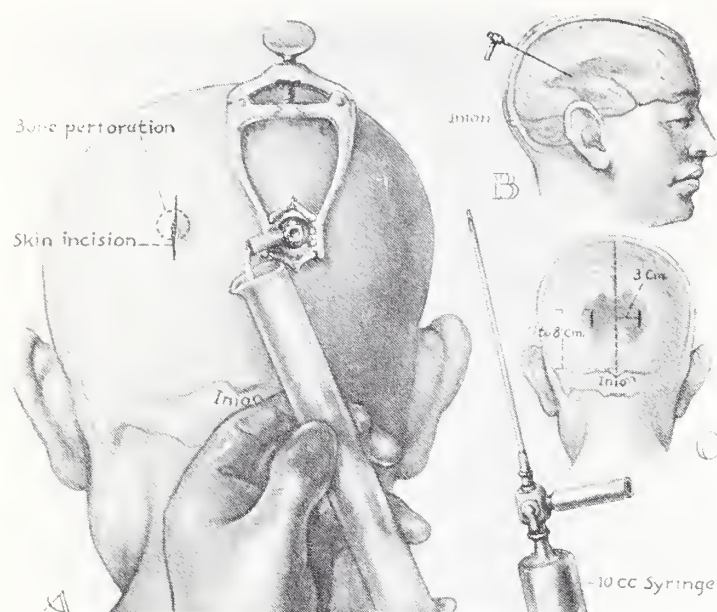


Figure 3

This illustrates major surgical steps in carrying out a ventriculogram on an adult in the 1930's. (From Sachs, Ernest: *The care of the neurosurgical patient*, St Louis, 1945, The C. V. Mosby Co.)

about 1936 and was quickly adopted by Drs Wilkins and Herrmann, and certainly increased the demand for their services. About 1938 they started doing thoraco-lumbar sympathectomies for hypertension, since there were no good drugs to control high blood pressure. Sympathectomies were also needed for causalgia. About 1939 Freeman and Watts in Washington, DC developed an operation called lobotomy for severely depressed patients and certain other major psychiatric problems. Dr Coyne Campbell, one of the eminent local psychiatrists, advocated several of these procedures which were carried out in this vicinity until Thorazine became available in the early 1950s.

Following the formation of The American Board of Neurological Surgery, the first examinations for certification were held in 1940. Dr Jess Herrmann was in the initial group to be certified by examination conducted by the Board. By this time Dr Wilkins held the title of Professor of Neurosurgery at the School of Medicine and thought perhaps because of his title he would be given automatic certification. However, the Board did not think he was old enough to be certified without examination and he finally took the examination in 1942, two years after his pupil already had passed it.

World War II started in December 1941, and both Dr Wilkins and Dr Herrmann sought

medical military duty but the State Manpower Board deemed Wilkins essential to Oklahoma. Whereupon, Dr Herrmann joined the University of Oklahoma Evacuation Hospital Unit which was activated in the summer of 1942 and was sent to the California desert to train for duty in Africa. After a period of preparation, the unit was then sent to Guadalcanal in the South Pacific. Following the invasion of the Philippines, the Evacuation Hospital Unit was transported to Luzon Island and their final stop when the war ended was near Manila.

During the early post-World War II period, the Board of Neurological Surgery asked Dr Wilkins and Dr Herrmann to set up a residency program at the University of Oklahoma. After Dr Herrmann left in 1942 the author had the pleasure of acting as part-time unofficial resident for Dr Wilkins in 1942 and 1943. Then Dr Herman Flanigin, resident in general surgery during the war, followed in this capacity insofar as his primary duties allowed. Dr A. C. Lisle, Jr. became the first official neurosurgical resident in 1946 and began practicing in Oklahoma City at the end of his residency. Subsequently, the following doctors have had all or part of their residency training in this program and have practiced in the city or cities indicated:

Maurice Capehart	Tulsa
Alvin Rix	Oklahoma City
Ronald Smith	Fort Worth
Clifford Allen	Tulsa
(deceased)	
Herman Flanigin	Tulsa and Little Rock
Bob J. Rutledge	Oklahoma City
Perry A. Mead	Anchorage and Fairbanks, Alaska
Richard W. Levy	New Orleans
George B. Livesay	San Antonio
Selman Sejanovich	Mendoza, Argentina
Daniel Sejanovich	Mendoza, Argentina
Oscar Stern	Mendoza, Argentina
John A. Coates	Tulsa
Don F. Rhinehart	Oklahoma City
William E. Hoffmeister	Winter Park and/or Orlando, Florida
Barton Carl	Oklahoma City
Donald Irby	Monroe, Louisiana
Kent Braden	Oklahoma City
Lloyd Garland	Lubbock, Texas
Robert Kendall	Winchester, Virginia
Richard Earnest	Oklahoma City
(deceased)	
Harry Tate	Air Force and Oklahoma City
Joe Hartzog	Air Force and Oklahoma City
Daniel Stough	Oklahoma City
Ronald Donaldson	Tyler, Texas

John McAlister	Winchester, Virginia
Stanley Pelofsky	Oklahoma City
Guy Danielson	Air Force and Tyler, Texas
Richard A. Smith	Oklahoma City
Stephen Samuelson	Denver, Colorado
John P. Carey	Hagerstown, Maryland
Glenn Schoenhals	Oklahoma City
Lonnie Lamprich	Oklahoma City

Current residents are: Stephen Cagle, James Rodgers, Barry Pollard, Douglas Polk and Charles Fullenwider.



Figure 4

Former residents and current residents assembled with Dr Wilkins and Dr Herrmann in 1969, on the occasion of Dr Wilkins' 65th Birthday celebration. All former residents who were still living and who were in the continental USA, except one, returned for this day.

Left to right:

First row: Drs Hoffmeister, Jess D. Herrmann, Harry Wilkins, Lisle.

Second row: Drs Irby, Rhinehart, Flanigin, Capehart, Kendall

Third row: Drs Garland, Stough, Levy, Livesay

Fourth row: Drs Rix, Rutledge, Pelofsky, Mead

Top row: Drs Braden, Coates, McAllister, Carl, Hartzog, Donaldson, Danielson

In the mid 1950's, the secretary of the American Board of Neurological Surgery noted that there were more certified neurosurgeons who had gone to the University of Oklahoma or who had had some training at the University of Oklahoma, than any other one medical school in the United States at that time.

Other graduates of the University of Oklahoma School of Medicine who became neurosurgeons in the 1930's were Dr Franklin Jelsma, Louisville, Kentucky; Dr Wallace Hamby, Buffalo, New York, and later, Chief neurosurgeon at the Cleveland Clinic; Dr Homer Swanson, Atlanta, Georgia; and Dr Herbert G. Crockett, Los Angeles, California. Currently, the chief of neurosurgery at the Mayo Clinic is Dr Ross Miller from Ada, Oklahoma, an OU graduate.

The first arteriogram in Oklahoma was done in the fall of 1947. The fifty-year-old patient presented herself at University Hospital Clinic with partial third nerve paralysis on the left side, and some left periorbital pain. It was felt from examination that she probably had an aneurysm of the internal carotid artery, intracranially, at the junction of the posterior communicating artery. Thus, it seemed appropriate to make use of the new technique of angiography. We knew from reports that Diodrast, the common agent used for intravenous pyelograms at that time, sometimes caused arterial irritation, particularly in the elderly. Therefore, we decided to use Thorotrast, a mildly radioactive substance but less irritating to vascular endothelium, for this examination. The left carotid artery was exposed under local anesthesia and the patient was transported around the corner to the X-ray Department which was then also on the fourth floor of University Hospital. When the x-ray tube was ready, with the technician holding a single x-ray cassette, six cc Thorotrast was then injected into the artery for one AP view of the artery and the aneurysm. Then, with the tube

repositioned for a lateral view, another six cc of the same material was injected. The lateral film did demonstrate the aneurysm. The patient was returned to surgery where the internal carotid artery was temporarily clamped and the patient observed. After a few minutes, she said "My tree hurts." Since her "vascular tree" was being treated, we felt that her overly-accurate reporting represented some early evidence of dysphasia. Accordingly, we released the clamp on the internal carotid and occluded the common carotid with fairly rapid improvement in her third cranial nerve paralysis and relief of her head pain. This, of course, is a far cry from the diagnostic studies available today for intracranial blood vessels and the surgical treatment of intracranial aneurysm and other blood vessel abnormalities.

In 1952, Dr William P. VanWagenen of Rochester, New York, a charter member of the Harvey Cushing Society, toured the United States, visiting various neurosurgical facilities. During his stay in Oklahoma City he witnessed Dr Wilkins remove a meningioma from the lateral sinus region of the mayor of one of the medium-sized cities in the state. A few months later he wrote to tell the Oklahoma

neurosurgeons that of all of the places in the country he had visited, the best neurosurgery he so far witnessed was in Oklahoma City.

Doctor Wilkins served as Chairman of the Division of Neurosurgery until 1958, when Dr Herrmann took over as chief of Neurosurgery. After both men retired December 31, 1966, Dr A. C. Lisle, Jr. served as head of the training program until Dr Robert Fisher became the first full time Professor of Neurosurgery in July 1967. When Dr Fisher left for New Jersey in March 1974, Dr Bob J. Rutledge took over as head of the division until Dr Michael Pollay arrived in August of 1976.

The late Dr Averill Stowell was the first neurosurgeon to practice in Tulsa, arriving there in 1948. Dr Maurice Capehart became the second neurosurgeon in that city. Other neurosurgeons practicing there have been Drs Robert Hayne, Clifford Allen (deceased), Herman Flanigin, Robert Imler, John Coates, Richard Tenney, Anthony Billings, Sam Shaddock, Kenyon Kugler, Marilyn Lins, David Fell and Frank Letcher (after a brief stint in Muskogee). Dr Perry Hewitt practiced in Muskogee for a brief period after World War II. In 1978, Dr Cecil J. Hash started practicing in Lawton, Oklahoma. The only neurosurgeons in Oklahoma City who have not been through the University of Oklahoma training program are Dr Pollay, his associate Dr Ralph Kaplan, and Dr Charles Bondurant, Jr. Dr Tom Huff, a graduate of the OU Medical School, trained in San Francisco and returned to practice in Oklahoma City a few years before he went to Stockton, California. Dr Ronald Smith practiced in Oklahoma City briefly before moving to Fort Worth, Texas.

The neurosurgery training program was aided immensely when Dr Gunter Haase became Professor of Neurology at the medical school in January 1960. He departed for Philadelphia in June 1964 to head the Neurology Department at Temple University and later, the University of Pennsylvania. Dr John Nelson, current Professor of Neurology at O U H S C, and his department have been most helpful.

Oklahoma neurosurgeons have been active in national and regional neurosurgical societies. As mentioned, Dr Wilkins was Vice-President of the Harvey Cushing Society (American Association of Neurological

Surgeons) 1950-51, and served as President 1954-55. He was President of Southern Neurosurgical Society in 1951. Dr Herrmann served as Vice-President of the exclusive American Academy of Neurological Surgery in 1956, and as President in 1958. Dr Stowell was an early Vice-President of the Rocky Mountain Neurosurgical Society, and thereafter its perennial treasurer. Dr Fisher, Dr Pollay and Dr Imler have served as President of this organization, and Dr Pollay and Dr Rix have served as Vice-President. Dr Kaplan is currently secretary and Dr Carl is treasurer of this regional group.

One of the surprises of Dr Wilkins' 65th birthday celebration was the presence of Dr Scott Hendren's mother, Sarah. Drs Wilkins and Herrmann had removed a meningioma from her head thirty-two years earlier and Mrs Hendren's sprightliness was a highlight of the evening.

By 1955, Drs Wilkins and Herrmann had operated on 1,000 brain tumors. Dr Wilkins' last operation on September 1, 1966 involved the total removal of a posterior fossa meningioma in a 60-year-old lady referred with a presumptive diagnosis of arteriosclerotic encephalopathy. She got along well post-operatively and made a remarkably complete recovery. Among Dr Herrmann's last operations in November and December 1966, were total removal of an eighth nerve tumor and total excision of a meningioma in a physician. Both patients have maintained excellent function for the past fourteen years.

On May 13, 1977, the University of Oklahoma presented a Distinguished Service Citation to Dr Harry Wilkins at ceremonies in Norman, Oklahoma. He was the fourth physician to be so honored by this award since its inception in 1948.

Although recently developed diagnostic and technical aids increase the neurosurgeon's competence, the pioneering efforts of Drs Wilkins and Herrmann and their astute diagnosis, meticulous patient care, and excellent surgical techniques have given Oklahoma a neurosurgical heritage which appears likely to endure for many years. □

ACKNOWLEDGEMENT

The author thanks Drs Wilkins, Herrmann, Lisle, Rutledge and Capehart for helpful suggestions and Dr W. Eugene Hollon, former OU Professor of History, Santa Fe, New Mexico for technical assistance.

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Sudden Infant Death Syndrome

In Oklahoma, Sudden Infant Death Syndrome (SIDS) is the largest single cause of post-neonatal infant mortality causing 90 to 100 of the estimated 650 post-neonatal deaths occurring each year. Approximately one-third of all deaths in infants between one week and one year of age result from SIDS, with the peak incidence occurring in infants between two and four months of age.

By definition, SIDS is the sudden death of any infant or young child, which is unexpected by history and in which a thorough post-mortem examination fails to demonstrate an adequate cause of death. In Oklahoma, all SIDS deaths automatically fall under the jurisdiction of the Office of the Chief Medical Examiner and therefore should be reported immediately.

The effect of SIDS upon the grieving parents oftentimes is devastating due to the unexpectedness of the death at a time in life when death is not ordinarily encountered. Often parents will wonder if they did something to cause the baby's death or, even worse, blame each other. The grief process is usually protracted and it may take a year or more before the parents learn to live with the memories. Local public



News From The Oklahoma State Department of Health

health nurses and the Oklahoma Chapter, National SIDS Foundation with active groups in Tulsa and Oklahoma City, are available for support to those families affected by SIDS.

In order to help families affected by SIDS, the Oklahoma State Department of Health is developing a Sudden Infant Death Syndrome Information and Counseling Project through a federal grant. The goal of this program is to develop a case-management system using existing resources across the state. It will become a resource center providing factual information, counseling and educational sessions for the professionals, paraprofessionals and community groups.

For information about the SIDS Information and Counseling Project, please call (405) 271-5193 or write SIDS Information and Counseling Project, Maternal and Child Health Service, Oklahoma State Department of Health. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JANUARY 1980

DISEASE	January 1980	January 1979	December 1979	TOTAL TO DATE	
				1980	1979
Amebiasis	—	—	6	—	—
Aseptic Meningitis	3	1	13	3	1
Brucellosis	—	—	—	—	—
Encephalitis, Infectious	—	—	1	—	—
Gonorrhea (Use Form ODH-228)	1362	1122	1028	1362	1122
Hepatitis A	19	5	22	19	5
Hepatitis B	14	3	19	14	3
Hepatitis Unspecified	12	2	18	12	2
Measles (Rubeola)	1	—	—	1	—
Meningococcal Infections	1	2	3	1	2
Pertussis	2	—	8	2	—
Rabies (animal)	14	11	23	14	11
Rocky Mountain Spotted Fever	—	—	—	—	—
Rubella	—	—	—	—	—
Rubella (congenital)	—	—	—	—	—
Salmonellosis	17	12	34	17	12
Shigellosis	10	11	41	10	11
Syphilis (Use Form ODH-228)	7	7	6	7	7
Tetanus	—	—	—	—	—
Tuberculosis	23	21	32	23	21
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—

FOCUS ON THE 80s

OSMA ANNUAL MEETING
May 8-10, 1980 • Lincoln Plaza Forum
Oklahoma City

SCIENTIFIC PROGRAM

Thursday, May 8

8:00 AM - 12:00 noon — ADVANCED CARDIAC LIFE SUPPORT

This special course offered in conjunction with the Annual Meeting is 12 hours in length and provides instruction in basic life support, mechanical resuscitator equipment, defibrillation techniques for intravenous therapy, including central venous cannulation, cardiac rhythm and dysrhythmia recognition and techniques for airway management including endotracheal and esophageal obturator intubation. The course includes four hours of didactic instruction and eight hours of laboratory instruction including "hands on" instruction in CPR, intubation, IV cannulation and management of simulated cardiac arrest situations.

The first portion of the course will begin 8:00 AM and run until 12:00 PM Thursday, May 8. The second portion of the course will run from 1:00 PM to 5:00 PM Friday, May 9. The third and last portion of the course will be held from 1:00 PM to 5:00 PM, Saturday, May 10.

Speakers: Danny J. Cassidy, MD, Medical Director, Emergency Medical Services Division, Presbyterian Hospital, Oklahoma City; M. Joe Crowthwait, MD, Midwest City.

Advance registration required. See Registration Form on page 129.

2:00 PM - 5:00 PM — OSTEOPOROSIS

The seminar on osteoporosis will feature a discussion of this metabolic bone disease which is a common disease process characterized by bone pain and pathologic fractures that present diagnostic and treatment problems to all primary care physicians and others who have an interest in the care of the elderly.

Speakers: Richard J. Hess, MD, Chairman; Louis V. Aviolo, MD, Director, Division of Bone and Mineral Metabolism, Washington University School of Medicine; Lila E. Nachtigall, MD, Professor of Obstetrics and Gynecology, New York University Medical Center.

2:00 PM - 5:00 PM — BLOOD COMPONENT THERAPY

Speaker: Ronald O. Gilcher, MD, Director, Oklahoma Blood Institute.

Friday, May 9

8:30 AM - 11:00 AM — CORONARY ARTERY SURGERY

The seminar on Coronary Artery Surgery will feature a discussion of one of medicine's most widely-debated procedures. Bypass surgery is heralded by some as the major advancement in the treatment of coronary disease. Others view it as a procedure which is both too costly and too widely practiced. Experts will discuss both sides of this controversial issue.

Speakers: Richard Marshall, MD, Chairman; Henry D. McIntosh, MD, Former Chairman, Department of Medicine, Baylor, Cardiologist, Watson Clinic, Lakeland, Florida; Charles F. Bethea, MD, Oklahoma City; R. Darryl Fisher, MD, Oklahoma City.

2:00 PM - 5:00 PM — DERMATOLOGY

The Dermatology session will feature a discussion of recent developments in the diagnosis and treatment of three common dermatologic disorders, particularly as they relate to general medicine. Topics will include scleroderma, rheumatoid vasculitis, and lupus erythematosus. Robert Goltz, MD, Chairman of the Department of Dermatology at the University of Minnesota, will discuss his month-long study of medicine in China in addition to the above-mentioned topics.

Speakers: Ray Cornelison, MD, Chairman; Robert Goltz, MD, Chairman, Department of Dermatology, University of Minnesota; Walter Burgdorf, MD, Oklahoma City; and Ross Hensley, MD, Lawton.

2:00 PM - 5:00 PM — ALIMENTATION AND HYPERALIMENTATION

This seminar will feature a discussion of malnutrition in the surgical patient which is a common problem for many physicians. Doctor Barrocas will discuss suggestions for both gastrointestinal and intravenous hyperalimentation.

Speakers: Richard Marshall, MD, Chairman, Oklahoma City; Albert Barrocas, MD, Tulane University.

Saturday, May 10

8:30 AM - 11:30 AM—FOCUS ON THE PHYSICIAN'S FAMILY

Too often busy doctors are too concerned about caring for their patients to give much thought about their own lives. This seminar is directed to the physician and the entire family. It is an opportunity to discuss the stresses and strains that each of us face in our daily lives and to receive professional advice about how to better handle the common problems which face professional families.

Speakers: Joe Ruffin, MD, Chairman; Perry Berman, MD, Private Practice of Psychiatry, Philadelphia.

Specialty Society Meetings

Friday, May 9

1:30 PM-3:30 PM—Oklahoma Society of Internal Medicine

Saturday, May 10

8:00 AM-12:00 noon—Oklahoma Academy of Otolaryngology

9:00 AM-11:00 AM—Oklahoma Society of Plastic Surgery

9:00 AM-2:00 PM—Oklahoma Society of Anesthesiologists

9:30 AM-4:30 PM—Oklahoma Urological Association

10:00 AM-12:00 noon—Oklahoma State Society of Ophthalmologists

1:30 PM-4:30 PM—Oklahoma State Dermatology Society

2:00 PM-3:00 PM—Oklahoma State Neurosurgical Society

Special Guest Speakers

Saturday, May 10

7:00 AM-8:00 AM—Doctor Bill Banowsky, President, University of Oklahoma

11:00 AM—Closing Session OSMA House of Delegates

Doctor Hoyt Gardner, President, American Medical Association

OSMA Business Sessions

Thursday, May 8

8:30 AM-9:30 AM—OSMA Executive Committee

9:30 AM-11:30 AM—OSMA Board of Trustees

12:00 noon -2:00 PM—Opening Session, OSMA House of Delegates

Friday, May 9

7:30 AM-8:30 AM—OSMA Past-Presidents' Breakfast

10:30 AM-12:30 PM—OSMA Reference Committees

Saturday, May 10

11:00 AM-2:00 PM—Closing Session, OSMA House of Delegates

Sports

Thursday, May 8

TENNIS

The annual Oklahoma State Medical Association Tennis Tournament will be held on Thursday, May 8 and Friday, May 9 in conjunction with our Annual Meeting. This year's tournament is scheduled for indoor play at Woodlake Racquet Club located at 6901 N.W. 63rd Street. Weather should be no problem with the excellent indoor courts. There is plenty of comfortable seating for spectators to view the tournament.

The ladies will begin at 8:30 AM on Thursday, May 8, and the men's play will begin at 12:30 PM on Thursday, May 8. On Friday our schedule will follow in like manner beginning with the ladies at 8:30 AM and the men at 12:30. We will have ladies' singles and doubles events and mens' singles and doubles.

Our entry blank will show that the competition will be divided into A and B flights. We must have at least 8 entries in any event in order to divide the competition in this manner.

Promptness for scheduled match time is necessary due to the apparent large entry and court availability. We would like for you to report for your matches 15 minutes before the scheduled time for the necessary adjustments of knee and elbow braces and the tying of shoestrings and the preliminary psyching of one's opponent.

Entry fee for singles will be \$15.00 per person with the second event (doubles) costing only \$10.00 per person.

We will have the "draw" made up by 7:00 PM on Wednesday, May 7, 1980. The draw will be posted on the spectator's balcony in the event you would like to see it before you play the following day. A copy of the draw is available by telephone by calling Mary Frances Coggins at 848-0519.

See registration form on page 129.

Friday, May 9

3,000 METER RUN

For the first time the Oklahoma State Medical Association will have a 3,000 meter run in conjunction with its 1980 Annual Meeting.

The run is tentatively scheduled to take place around 9:00 AM on Friday, May 9. As of this time a course has not been designated, but this is being worked on and will be finalized and each person who has shown an interest in participating will be notified about the details.

If you are interested in participating in a 3,000 meter run, please fill out the entry form and return it to the Oklahoma State Medical Association headquarters, 601 NW Expressway, Oklahoma City, Oklahoma 73118 before May 2, 1980.

See registration form on page 129.

GOLF

The 1980 Oklahoma State Medical Association Annual Meeting Golf Tournament is scheduled for Friday, May 9, at Quail Creek Golf and Country Club, 3501 Quail Creek Road, Oklahoma City. Tee times are scheduled to begin at 1:30 PM with the tournament being played in groups of four. Play and tee times will be scheduled and coordinated by the course pro.

Due to course rules and regulations, it will be necessary that each player register in advance. The registration fee for non-members of Quail Creek Golf and Country Club will be \$30. The registration fee for members of Quail Creek Golf and Country Club will be \$10. The registration fee will go to cover the expenses for green fee, cart rental and golf balls.

Please complete the entry form and mail it along with your check before May 2 to the Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, Oklahoma 73118.

If you have any questions, please call 405 843-9571.

See registration form on page 129.

Social Functions

Thursday, May 8

11:30 AM-12:30 PM—Kick-Off Luncheon in Exhibit Hall

6:00 PM-7:00 PM—University of Oklahoma Alumni Reception

7:00 PM—University of Oklahoma Alumni Dinner/Dance

Friday, May 9

12:00 noon-1:00 PM—Complimentary Luncheon in Exhibit Hall

6:00 PM—OSMA President's Reception

7:00 PM—OSMA President's Banquet

Saturday, May 10

7:00 AM-8:00 AM—President's Prayer Breakfast

Auxiliary Functions

See Auxiliary Page in this *Journal*.

Registration

Registration will be open from 8:00 AM until 5:00 PM, Thursday, May 8; from 8:30 AM until 5:00 PM Friday, May 9; and from 8:00 AM until 12:00 noon Saturday, May 10.

Endowment Program Healthy But Short of Goal

For the second year in a row contributions to the OSMA Medical School Endowment Program have been sizable but short of the goal set two years ago. During 1979, contributions from OSMA members totaled \$44,205. This is short of the goal of raising \$750,000 over a three-year period. Medical school officials said, nonetheless, that they were pleased by the program and extremely thankful for donations to underwrite some costs of medical education.

In 1978, the OSMA House of Delegates voted to coordinate a statewide continuing medical education program to be developed by the University of Oklahoma Health Sciences Center and OSMA. The house also voted to establish

this program within the academic framework of the Health Sciences Center in order to improve the quality of the program and to increase the involvement of the college.

OSMA members have committed themselves to assist the program financially by endowing a teaching position at the Health Sciences Center. Earned income from an endowment of approximately \$750,000 will pay the full salary of a professor.

The House of Delegates has asked OSMA members to contribute \$600 toward this endowment fund with an option to donate the entire sum at once, or beginning last year, doctors can make an annual gift of \$200 for three years.

Here is a county-by-county breakdown of contributions in 1979:

OSMA GRADUATE MEDICAL EDUCATION ENDOWMENT PROGRAM 1979 CONTRIBUTIONS

County Society	\$30	\$75	\$100	\$150	\$200	\$400	\$600	Total
Beckham					1			200.00
Canadian					2			400.00
Carter-Love-Marshall					1			200.00
Choctaw-Pushmataha				2				300.00
Cleveland-McClain					3			600.00
Comanche-Cotton-Tillman					2			400.00
Custer					1			200.00
East Cent. Okla.					7			1,400.00
Garfield					4		1	1,400.00
Logan					2			400.00
Northwest Counties					11			2,200.00
Okfuskee			2		4			1,000.00
Oklahoma	1	1			141	1	5	31,705.00
Okmulgee					4			800.00
Pottawatomie					1			200.00
Stephens					3			600.00
Tulsa			2		5		1	1,800.00
Washington-Nowata					2			400.00
TOTALS	1	1	4	2	194	1	7	\$44,205.00

TELEPHONE MESSAGE

While physicians are attending the Oklahoma State Medical Association Annual Meeting in Oklahoma City, emergency calls may be referred to:

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A courtesy message center will be maintained by Southwestern Bell Telephone throughout the Annual Meeting. The main message center will be located near the exhibit hall at the Lincoln Plaza Center.

Board Determines Action At Quarterly Meeting

Increased membership has entitled OSMA to a fourth delegate to the House of Delegates of the American Medical Association. Dr William Leebron, OSMA president, announced the new delegate position in his opening remarks to the Board of Trustees at its quarterly meeting in February.

Leebron said Oklahoma is ranked twenty-first according to physician population in the US but said only 12 states in the AMA House have more representation.

He also commented about the early success of the Physician's Liability Insurance Company (PLICO). Leebron told the board that more than 3,000 physicians are now insured by PLICO and that capitalization fees charged to participants have nearly erased the company's original debt.

Medical doctors and legislators have been considering the transfer of University Hospital from the authority of the state legislature to the welfare department. Governor George Nigh had requested that the board endorse this action. Instead, the board voted to continue its support of the quality of medical education, but decided not to assume a definite position until the OSMA House of Delegates reviews the matter at its next meeting to be held in May.

Last November the board approved the formation of the Health Planning Advisory Committee. Doctor George Smith, chairman of the committee, recommended that the board approve a new staff health planning position or reassign responsibilities among the current OSMA staff since health planning activities require a great deal of time and staff assistance. The board voted to refer this problem to the Council on Planning and Development for further consideration.

Recently, the Texas Medical Association voted to dissolve its Peer Review Committee because the Federal Trade Commission has charged that committees in some states are guilty of price-fixing. The OSMA Board considered the future of its own Peer Review Committee and decided to continue its existence until a final decision is made at the annual meeting in May.

John Blaschke, MD, chairman of the 1980 Annual Meeting Committee announced new changes in the upcoming spring event. Among

the most significant changes will be a prayer breakfast on Saturday featuring Dr Bill Banowsky, president of the University of Oklahoma. Blaschke also announced that OSMA and the OSMA Auxiliary are co-sponsoring a special seminar focusing upon the physician and the physician's family. This seminar will address specific problems unique to the doctor's home life.

Other prominent action during the OSMA Board meeting included a report on the OSMA Jail Project and an update from the Ad Hoc Committee on Nurse Practitioners. The board also welcomed Jerome Kelly, the new executive director of the Oklahoma Foundation for Peer Review. He was graduated from Northern Illinois University in 1973 with an MS in Community Mental Health. He also obtained graduate degrees from the University of Notre Dame and St Mary's Seminary and University. □

Generic Thyroid Preparations Could Have Wrong Dosage

Individuals taking a generic thyroid replacement preparation could be obtaining improper dosages according to a Harvard Medical School research unit.

Both generic and brandname preparations are available for the approximately 15 million prescriptions written each year for thyroid replacement medication in the United States. The Harvard research indicates that wide variations of hormonal content are contained in the preparations.

One researcher said fluctuations of this type have occurred previously in preparations produced by unknown or unreliable manufacturers, and that these biologically ineffective preparations could be avoided by the physician if he specified a brand name on the prescription. However, this practice has been discouraged by recent emphasis on the use of generic equivalents.

The researcher also said the study seems to indicate that physicians or pharmacists, in an attempt to reduce medication expenses, could be supplying patients with a generic thyroid replacement preparation with either more or less than the expected biologic activity.

The researcher suggests that guidelines be established for the hormonal content of these medications in order to avoid improper dosages. □

Austrian Physician Finds A Home in Oklahoma

Thousands of immigrants left their native homeland for a new life in America when German troops under the command of Adolph Hitler invaded and occupied Austria in 1938. Among those immigrants seeking the security of America was Dr Leo Lowbeer who is now a pathologist at Hillcrest Medical Center in Tulsa.

Doctor Lowbeer obtained his medical education at the University of Vienna and later he became an assistant pathologist to a famous American physician, Dr Jakob Erdheim. He also gained experience as an assistant in internal medicine before leaving Austria.

The Austrian physician immediately acquired a medical license from New York when he arrived in this country. Within a few weeks he learned about an opportunity in pathology opening in Tulsa. Although Oklahoma did not issue medical licenses to foreign doctors at that time, Lowbeer nevertheless was offered the job because of his impressive medical background.

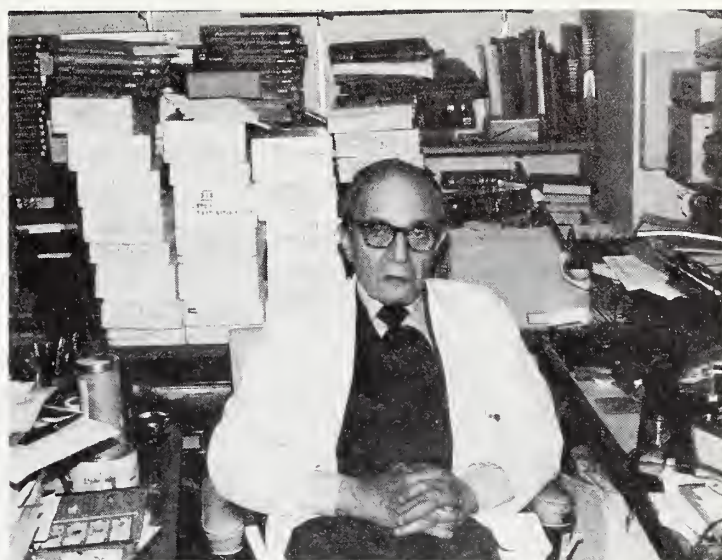
Twelve years after Lowbeer's arrival in the midwest, the Oklahoma Supreme Court ruled that refusal to issue a medical license to a foreign physician was unconstitutional and Dr Lowbeer became one of the first foreign medical doctors to be licensed by the state.

Eventually he became Hillcrest's chief pathologist and remained in that position until his retirement in 1967. He has also become an internationally known medical expert in the field of pathology. He has given lectures and has written articles for medical publications throughout the world. He is the recipient of numerous awards recognizing his devoted service to others and to the refinement of his medical skills.

Although Lowbeer is retired, he has not ceased working. He continues to serve as a consultant to Hillcrest Hospital and other physicians.

One baffled physician recently requested Lowbeer's advice about an unusual lesion on a patient's face. Lowbeer's vast medical experience enabled him to diagnose a disease rarely found in Oklahoma. It was leprosy.

As a pathologist, Lowbeer has observed a variety of cases involving abnormal diseases and deaths. He said one of the most unfortunate cases in his medical experience involved a middle-aged man who had entered the hospital



Leo Lowbeer, MD

in 1954 with a severe inflammation of the stomach and intestine. Finally, after three weeks the patient returned home, but within 24 hours the doctor said this man was rushed to the hospital's emergency room where he died. The patient's physicians determined the cause of death to be from heart failure, but Lowbeer discovered traces of poison during the autopsy. The man's wife finally admitted that she had poisoned him. Later, she also confessed to the poisoning murders of her three previous husbands.

Lowbeer's office reflects his other interests but a quick glance at it would not be sufficient to reveal the clues. Books, papers, equipment, boxes and miscellaneous items fill his office except for a cleared path leading to his chair behind a desk heaped high with an assortment of paraphernalia.

"It's a mess. I just don't have enough space for it all. But I know just about where everything is," the pathologist remarked.

The doctor is a photographer and stacked at one side of his desk are numerous boxes containing more than 100,000 slides. He said his favorite subject to photograph was a pet dog he used to own named Rusty. Photographs of Rusty and Oklahoma landscapes decorate the sections of Lowbeer's office walls not occupied by shelves of books.

Sprinkled across the mounds of paraphernalia upon his desk is tobacco. He enjoys smoking a pipe. But — *a pipe* — is not all he owns. The doctor collects pipes; he owns nearly 250 of them. "I have so many, but I just get along with the fifty or so scattered around my office," he said.

Part of the cleared path leading to Lowbeer's office chair is outlined with a row of albums.

Lowbeer enjoys music too. The physician used to play the piano, and when he was younger he and his friends entertained themselves by playing chamber music in their homes.

Until recently, Dr Lowbeer participated in tennis and snow-skiing. He used to ski competitively in Austria by racing in downhill and slalom events. This devoted physician has even tried skiing as recently as last year . . . and in Tulsa as a matter of fact. He took advantage of last year's winter weather and deep snow to maneuver himself and his ski equipment through Tulsa's streets to the hospital. □

OSMA Committee Joins In Legislative Activity

"The Oklahoma State Medical Association's Legislative Committee has become active in several areas during the first three months of the legislative session," says Lyle Kelsey, OSMA associate director.

Kelsey said legislation involving nurse practitioners and subspecialties within the area of nursing has dominated much of the Legislative Committee's time. The committee, under the

chairmanship of W. L. Hughes, MD, has been working with a special liaison committee between OSMA and the Oklahoma State Nurses' Association to determine protocols for the cooperative efforts between medicine and nursing.

"It is the hope of the special liaison committee that much of its work will be instrumental in providing amendments to the pending nurse practitioner legislation," Kelsey said.

Another area of interest for OSMA's Legislative Committee is mental health. "Again, this year, mental health has accounted for the largest number of individual legislative bills on any one topic," Kelsey said. He said legislation has been introduced to recodify the mental health code.

The OSMA Legislative Committee has registered opposition to the legislation and has been working with the Public and Mental Health Committee to insure acceptable and workable changes.

The OSMA Legislative Committee has also been monitoring other bills which include legislation on certificate of need, nursing homes, the cost of reproducing medical records, political action committees, and medical-legal legislation. □

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Peer Review Has New Director

Jerome Kelly, 36, assumed the position of executive director of the Oklahoma Foundation for Peer Review in January following the resignation of former director, Ed Kelsay.



Kelly has served as executive director of the Indiana Area VI Professional Standards Review Organization. He administered all activities for the organization's board of directors which included increasing voluntary membership, negotiating funding requests and designing the board's full program for peer review.

He has also acted as an assistant director to the Health Insurance Association of America. Among his responsibilities was the coordination of the first program of inpatient quality and utilization review for patients insured by private health insurance carriers.

The new director was graduated from Northern Illinois University in 1973 with an MS in Community Mental Health. Prior to that time

he also obtained graduate degrees from the University of Notre Dame and St Mary's Seminary and University. □

Obesity Could Cause Early Death

The risk of death zooms high in obese individuals according to a report in the February 1, *Journal of the American Medical Association*.

The report cited a study of 200 obese men weighing more than 300 pounds apiece who had entered Wadsworth Hospital Medical Center, Los Angeles, in order to lose weight. The study also included a seven-year follow-up period for each of these men after they left the hospital.

Fifty of the 200 men died within the seven-year period. Obese men from the ages of 25 to 34 had a 12-fold increase in the death rate of men of normal weight in this age bracket. Death increased sixfold among men from the ages of 35 to 44. However, as age advanced this ratio declined.

The report said a frequent cause of death for these men was cardiovascular disease. It also said the heavier the man, the greater risk of early death. □

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State Board of Medical Examiners Enforce Discipline

In the past two years over forty Oklahoma physicians have been summoned before the Oklahoma State Board of Medical Examiners. Four licenses have been revoked; four have been suspended; twelve physicians were placed on probation; two received board reprimands. Other doctors were counseled and encouraged to alter their practices. All were cited for alleged violations of the Medical Practice Act.

The seven physician board members are charged by state law to enforce the Medical Practice Act, the statutory authority under which doctors receive their license and the right to practice medicine.

"The primary purpose of the Board of Medical Examiners is to enforce the Medical Practice Act which insures the protection and safety of medical care to the citizens of Oklahoma and to assist in the rehabilitation of physicians whose ability to practice medicine is impaired for whatever reason," says Harry B. Tate, MD, Oklahoma City, secretary-treasurer of the board. "We are much more interested in the rehabilitation of an individual than in taking his license away," said Tate.

Recent legislated changes have significantly altered the board's procedures for investigating and hearing physician complaints. "The open meeting law has resulted in a very formalized process," says Karen Kennedy, one of the two lawyers retained by the board, "they must openly discuss the cases in the presence of physicians and the public and make their decisions in the presence of all in attendance."

James W. McDoniel, MD, Chickasha, board vice-president, said they must exercise special caution while discussing cases because they cannot say more than what concerns those facts presented at the hearing and that they must also be careful not to allow their personal feelings to enter into the open discussion.

This formal procedure established in the Administrative Procedures Act has resulted in the creation of a special investigation division. A. Raymond Switzer, a former FBI agent, heads the team of four field representatives, all of whom have formal investigative and law enforcement training.

"The investigation of a physician can only begin after a formal complaint has been re-

ceived by the board," says Switzer, "We can't afford to jeopardize a physician's professional standing and practice on the basis of hearsay evidence. But we receive complaints from a variety of sources," he explained, "patients, hospital personnel, nurses, and others who have contact with doctors."

"Pharmacists are among those filing many of the complaints," said Frank L. Adelman, MD, Enid, president of the board. "They are very conscious of prescription orders, drug abuse, and indiscriminate prescribing, which are among our biggest problems."

"The excessive prescribing, of controlled drugs without evidence of medical need and the personal abuse of drugs or alcohol are the most common offenses committed by physicians," says Tate.

The Medical Practice Act identifies certain activities considered to be "unprofessional conduct" and empowers the board to conduct an investigation and hold hearings. The board is authorized to issue disciplinary actions, and during the past few years, discipline has become the most time-consuming responsibility.

"The Board has always been conscientious and effective in the area of discipline, but it has received more publicity of late because of the open meetings," said Tate.

Tate said the responsibilities of a demanding profession create enough pressure for some doctors to cause them to commit violations by prescribing drugs for themselves. Although no physician is immune from the potential drug problem, McDoniel said rural physicians probably have the highest percentage of drug offenses according to their population. This is especially true of those physicians practicing alone in secluded areas.

"Physicians in metropolitan areas have contact with each other which strengthens the bond to resist this kind of pressure," he said.

According to Tate, the board makes every effort to steer the drug offender into some proven rehabilitation program. But we have to be firm. Intemperate use of drugs and alcohol affects the ability to practice medicine with reasonable skill and safety, and we would be defaulting on our public responsibility if we didn't take definitive action. Only a small percentage of doctors are drug abusers, but that small percentage receives the publicity which seems to enforce the public's critical attitude toward doctors."

Another kind of drug violation occurs when a physician prescribes a controlled drug without

establishing sufficient medical evidence that the prescription is medically necessary. "Sometimes doctors just can't seem to say no," reflected Tate. "Patients can put tremendous pressure on the doctor to prescribe a small quantity to get rid (sic) of the patient. What the doctor doesn't know is that he is one of five doctors that the patient is seeing, all doing the same thing. He's only adding to the patient's problem rather than helping," he said.

"The drug offenses are a reflection of the times, and it takes discipline not to give in to pressure applied by some patients. Disciplinary action by the board in these kinds of cases is a service to the doctor. One of the strongest things a physician can tell his patients is that his license could be revoked if he submits to their request for drugs without evidence of medical need."

Another form of drug abuse involves those physicians practicing the good drug prescribing habits of twenty years ago, which have since become outdated. Many of these doctors genuinely do not know not to prescribe these drugs. However, in the last several years the board has made an effort to inform physicians about the outdated drugs by mailing special letters," Adelman said. He also said about 95 percent of these physicians who have been called before the board have stopped prescribing these drugs and were glad to quit.

Physicians found to be guilty of violating the Medical Practice Act can have their license revoked or suspended, or they can be placed on probation. Physicians on probationary status or who have a suspended license are usually subjected to various levels of surveillance. This involves periodic appearances before the board throughout the duration of the penalty. Doctors under surveillance may also be required to obtain medical or psychiatric care, maintain duplicate records of all prescription orders, or submit to random blood and urine samples to screen for drugs or alcohol. Failure to respond to these requests could result in revocation of the physician's license.

"There are over 4,000 physicians licensed and residing in Oklahoma. Of these, only a few are knowingly violating the licensing act. The board is making an honest effort to clean up the profession, and in most cases after a physician has been summoned before the board, he straightens out his practice," said Tate.

"The board holds regular quarterly meetings, and the hearings usually include three to four new cases and a dozen or so appearances.

This responsibility is unpleasant at times," said Doctor McDoniel.

"No one enjoys being a conscience for someone else."

The members of the board agree that they are seeing fewer physicians who are violating the law deliberately, especially since disciplinary action has become the emphasis of the Medical Practice Act. They hope these efforts along with educational activities will lessen the need to discipline physicians. □

Jail Project Advisory Committee Sets Forth Action

The OSMA Jail Project Advisory Committee held its first meeting in January to determine future actions for the project.

OSMA has selected ten jail sites to participate in its project to upgrade jail standards to a level that will comply with those set by the American Medical Association.

The committee reviewed the deficiencies of each of the selected jail sites and determined that each facility needs a formal, medical authority to act as a mediator between OSMA and the jail. After the committee establishes a medical liaison for each project jail, procedures to upgrade the jail sites will be implemented.

The committee decided to ask county medical societies having a selected jail site in its county to assist the project as an established medical authority. It also made plans to ask hospitals within the area of each jail to consider a contractual arrangement for the use of their facilities by jails with inmates who need hospitalization. The committee also decided to locate available county health departments that will provide for some of the medical needs of the jail facilities. □

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Deaths**DONALD D. LENSGRAF, MD**
1924-1980

Oklahoma City anesthesiologist Donald D. Lensgraf, MD, died March 2, 1980. Born in Alberta, Canada, Dr Lensgraf was graduated from the University of Tennessee College of Medicine in 1952. Following his residency training he practiced in Chattanooga, Tennessee before coming to Oklahoma City.

JOHNNY A. BLUE, MD
1902-1980

Oklahoma City allergist, Johnny A. Blue, MD, died January 31, 1980. Born in Texas, Dr Blue was graduated from the University of Oklahoma College of Medicine in 1934. His practice was established in Oklahoma City in 1945. Doctor Blue had served as president of the American Association for Clinical Immunology and Allergy and was a member of the American College of Allergy, the American Academy of Allergy and the American College of Physicians.

DAVID C. CLEMANS, MD
1919-1979

David C. Clemans, MD, Bartlesville anesthesiologist, died December 26, 1979. Born near Hooker, Oklahoma, Dr Clemans was graduated from the University of Oklahoma College of Medicine in 1952. Following a few years of general practice in Hartshorne, he took his residency training in anesthesiology, establishing his practice in Bartlesville in 1969. Doctor Clemans was founder of the Bartlesville Club of the Physically Handicapped and was named Oklahoma handicapped citizen of the year in 1974.

Merle L. Whitney, MD, 71, retired Norman physician, died February 4, 1980. Doctor Whitney was a native of Talmage, Kansas and was graduated from the University of Kansas School of Medicine in 1935. He had practiced in Kansas and Okemah, Oklahoma before establishing his practice in Norman in 1960. He retired in 1975. For his years of dedicated service to his profession and to humanity, the OSMA presented Dr Whitney with a Life Membership in 1975. □

IN MEMORIAM**1979**

<i>Floyd T. Bartheld, MD</i>	<i>March 5</i>
<i>Richard L. Harris, MD</i>	<i>March 28</i>
<i>Daniel R. Storts, MD</i>	<i>April 15</i>
<i>Thomas P. Bigbee, MD</i>	<i>April 16</i>
<i>Charles F. Engles, MD</i>	<i>April 21</i>
<i>Richard M. Taliaferro, MD</i>	<i>March 30</i>
<i>Steve H. Baker, MD</i>	<i>March 30</i>
<i>Gerald Bednar, MD</i>	<i>May 2</i>
<i>Howell A. Scott, MD</i>	<i>May 22</i>
<i>Harry B. Stewart, MD</i>	<i>May 31</i>
<i>Walter M. Cox, MD</i>	<i>June 4</i>
<i>Francis W. Pruitt, MD</i>	<i>June 20</i>
<i>Paul M. Vickers, MD</i>	<i>June 26</i>
<i>John H. Robinson, MD</i>	<i>July 30</i>
<i>Marvin Elkins, MD</i>	<i>August 20</i>
<i>Hugh J. Evans, MD</i>	<i>August 25</i>
<i>Caspar A. Hicks, MD</i>	<i>August 27</i>
<i>William R. Schmieding, PhD</i>	<i>September 16</i>
<i>Ernest Lachman, MD</i>	<i>September 21</i>
<i>Walter H. Dersch, Jr., MD</i>	<i>August 26</i>
<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>

Cosponsoring Programs for Category 1 Credit

As an organization accredited by the American Medical Association to cosponsor programs in continuing medical education, the Office of Continuing Medical Education for Physicians at the University of Oklahoma College of Medicine is frequently approached for this purpose by various groups developing programs outside the college. We are glad to offer cosponsorship to any medical group provided that the program contemplated is developed and conducted in conformity with the requirements established by the AMA. Listed below are the four basic principles essential for cosponsorship published by the Council on Medical Education of the American Medical Association:¹

1. The accredited organization/institution must be fully familiar with any program it might cosponsor.
2. The accredited institution/organization

must actively participate in the planning of the program it cosponsors.

3. The accredited institution/organization must assume full responsibility for the quality of the program it cosponsors.
4. The accredited institution/organization must have its name placed on the program as a bona fide cosponsor.

Failure on the part of the Office of Continuing Education for Physicians to insist upon strict adherence to all of these requirements would place our accreditation in jeopardy — we cannot “bend the rules.” We welcome the opportunity to assist any legitimate group in qualifying a program for Category 1 credit, and will do so gladly within the framework upon which our own accreditation rests. *David C. Mock, MD, Acting Director, Office of Continuing Medical Education for Physicians, University of Oklahoma College of Medicine.*

1. *Guide to Accreditation*. Committee on Accreditation of Continuing Medical Education. American Medical Association Council on Medical Education. July, 1979.



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Coronary Operation Does Not Usually Stifle Ability to Work

A coronary bypass operation will not hinder a patient's ability to earn a living if the patient is still young at the time of surgery according to data developed by research unit at the Medical College of Wisconsin, Milwaukee.

The research unit studied 564 male patients over a five-year period following their operations in a Milwaukee hospital.

"Our results indicate that a large majority of younger patients with aortocoronary bypass operation who were employed before the operation returned to work one year after the operation and have remained employed for the additional three years. The decision not to remain employed is more prevalent among the older patients," one researcher said.

Ninety percent of the men under the age of 55 returned to a working situation within four years after their surgery while 68 percent of the men between the ages of 55 to 59 became

employed in that time and 44 percent of the men over 60 returned to work in four years.

In addition to age at the time of the operation other physical factors also determined whether a patient went back to work within four years. These involved the return of chest pains after an operation and whether a patient had suffered a previous heart attack. □

Recruitment Information To Assist Doctors and Communities

Doctors in search of communities in which to establish a practice and communities needing physicians may find assistance in the 1980 *Physician Placement Register*.

This publication lists physicians seeking new professional positions according to specialty, date of availability, educational and training background, type of practice, location and size of community preferences and other data.

Information about various communities with openings for physicians are indexed by specialty, type of practice, date of availability, financial arrangements, location and size of community and other data.

The publication also briefly discusses the potential difficulties associated with physician recruitment and offers some answers and alternatives to these situations.

In addition to the *Physician Placement Register*, AMA has also published a brochure entitled, *A Physician's Guide to Finding a Place to Practice*. It includes a checklist of important points for physicians to consider as they look for new locations in which to establish a practice.

Copies of the register and brochures are available from the Physicians' Placement Service, American Medical Association, 535 N Dearborn Street, Chicago, Illinois 60610. □

Lower Coronary Disease Rates Among Distance Runners?

Coronary disease could be less of a risk to long distance runners, however, this theory has not yet been proven by medical science.

A study was conducted involving 50 physician-runners and 50 non-running doctors. The study indicated lower pulse rates and lower relative weights in addition to elevated

high-density lipoprotein (HDL) cholesterol levels in the blood of the runners.

Doctor Marvin M. Adner, Framingham Union Hospital, Massachusetts, said that theoretically high-density lipoprotein (HDL) could act as an agent in removing cholesterol from body cells, thus helping to protect individuals against coronary artery disease. He said if the theory that increased HDL lowers the risk of heart disease as it is assumed, then distance runners have a lower risk of acquiring coronary artery disease than non-runners.

The hypothesis that exercise elevates HDL cholesterol levels, resulting in protection from coronary artery disease, is an attractive, well-publicized theory. Undoubtedly, it is an important motivating factor for those millions of Americans who have taken up distance running. Although reasonable, this hypothesis remains unproved. It is hoped that the observations made of long-distance runners over a period of years will clarify the issue. □

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Oklahoma Symphony To Hold Telethon

Oklahoma Symphony's second annual telethon — Superband — will be telecast live from Civic Center Music Hall on KWTB-TV-Channel 9. The event is scheduled for Sunday, April 29, 7:00 P.M. - 10:00 P.M.

Purpose of the telethon is to generate community support and interest in the symphony. Viewers will have an opportunity to purchase season tickets for either the Classic or POPS series. However, season ticket holders who have already renewed for the 1980-81 season are requested not to call during the telethon.

Singer Kelly Garrett, who performed with the symphony last season, is the scheduled guest artist for the telethon. Other local personalities will appear throughout the three-hour television special. Volunteers will staff the phones to take ticket orders. □

Miscellaneous Advertisements

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Worrisome Headlines

"Japan Surpasses U.S. as World's Largest Producer of Automobiles" So it went for one of this nation's largest and most important industries. Explaining the tragedy is neither easy nor simple; the reasons are complex and include such diverse influences as the reduced productivity of the American auto worker operating within the guidelines of a powerful and relatively unbridled union; the unyielding mercenarism and total lack of vision of the industry's management, and the soaring costs of complying with the constantly deepening flood of governmental regulations pouring from our psychopathic, "businesscidal" bureaucracy.

Irrespective of the precise pathogenesis, our once magnificent automobile industry is critically ill if not dying, and since our federal government has taken unto its own authority the right to regulate unions, wages, employment policies, prices, profits, manufacturing practices, environmental, safety, health and pollution standards, *and* has made the imprudent decision to loan taxpayers' money to a business bankrupted by its own meddling, the same federal government must accept total, unshared culpability for the plague that has sickened the industry.

"Thousands of Ailing Americans Flock to Mexican Clinics" In desperation and acutely aware of the new-drug lag which now exists in America, our poorly-informed citizens, ill and

angry, have abandoned our tardy-but-tested therapies to expose themselves to the indignities of foreign and unknown, possibly harmful treatments which carry breath-catching price tags. But, says the bureaucracy, even though we are trying to force you to advertise, we won't let you misrepresent your services or their results. We will keep you clean and honest, the same way we keep the military services honest with their recruiting ads . . . and the mail order businesses with their junk-mail solicitations.

Presently it is assumed that the Mexican cure clinics offer nothing new or dramatic. But what will happen when something comes along — as it almost certainly will — that *does* cure rheumatoid arthritis or cancer? Hearing of it and believing it will not be available in the US for many years, hundreds of thousands of despairing patients in this country will go to Mexico — or Germany or Japan — for the miracle drug which, ironically, might have been developed and manufactured in our own country. Then, the headlines might read, "U.S. Medicine Lagging Years Behind All Other Nations In Providing Care for Seriously Ill."

When such an unhappy event occurs our health care "industry" will mimic the fate of our automobile industry, our space program, our nuclear energy projects and our railroads.

By then, possibly, all our headlines will be written and published by our benevolent bureaucracy and none of them will be worrisome. Everything will be simply dandy. *MRJ*

This is my first President's page, and I wish to thank you for the honor of allowing me to serve in this position. It will be an interesting year because of the many political and social changes that will influence the practice of medicine.



In this first communication, I would like to discuss the question that has been asked me repeatedly over the past year. That question is why would a relatively (?) sane physician accept the Presidency of OSMA with all the work, travel and loss of time from my office that this entails? I am sure that this is difficult for a physician who has not worked in OSMA to understand. However, for those of us who have been involved for many years, the best answer that I can give is that the Association is a FAMILY, of which each of us is a responsible member. Physicians from over the state meet to discuss the vital issues facing us today, make recommendations and shape our policy. They wish to have input in medical, legislative and social areas. A person in clinical practice must enjoy people, or his life certainly will be a miserable one. Being active in the OSMA allows interested physicians who truly like people to meet and gain fellowship while discussing the issues

mentioned previously. Where else but the OSMA can one visit with friends as Elvin Amen from Bartlesville, Clarence Taylor from Ada, Lowell Templer from Altus, Marvin Margo and Kent Braden from Oklahoma City, and many, many others. Also, one must not forget the fellowship and advice of the sage from the short grass country, Ed Calhoon of Beaver. The close relationship that I have had this past year with your immediate past-president, Bill Leebron from Elk City, has been an example of two physicians from far across the state getting together and exchanging ideas on important issues, but, also, having true fellowship. We must not forget the executive staff who really "keeps the show on the road," while maintaining an excellent and friendly relationship with those that they serve.

Those of you who are baseball fans will remember that the "FAMILY" typified the spirit of the Pittsburgh Pirates who won the World Series last year. There must be a true family relationship among the physicians over the state to make OSMA successful and promote ideas for better medical care. If you have not participated in OSMA activities, I would use the popular adage of a few years ago: Try it, you'll like it.

Lloyd S. Miller, M.D.

Human Breast Milk Banking in Oklahoma

GEORGE P. GIACOIA, MD

Perfection of techniques has sparked the organization of human milk banks. There are advantages, limitations and potential risks in using banked human milk.

Recently, after a period of several decades, during which proprietary formulas were used predominantly for feeding premature infants, there has been a return to human milk feedings. The new demand for fresh breast milk for preterm hospitalized infants, however, may prove difficult to meet when mothers do not live near the hospitals caring for the infants.

Setting up a human breast milk bank presents difficult challenges. Not only must the logistics of collecting the milk and screening it for bacterial and other contaminants be worked out, but appropriate storage conditions must also be ensured. In the United States there are now over 30 human milk banks, but since no standards have been set, techniques for collection, processing, and storage vary considerably. Because of a wide-

spread need to correlate data on this subject, we are reporting our experiences in setting up a regional human breast milk bank at the Eastern Oklahoma Perinatal Center at Saint Francis Hospital in Tulsa, Oklahoma.

RATIONALE

The return to using human milk in intensive care nurseries can be directly related to recent discoveries of anti-infective properties in human milk coupled with an increase in the incidence of necrotizing enterocolitis, a disorder that is frequently fatal to premature infants.

Various non-nutritional qualities of human breast milk have been reported. Several years ago Warren et al¹ observed that breast-fed infants failed to develop infection with vaccine poliovirus following the administration of the Sabin oral vaccine if the mother had greater than 1:16 poliovirus titer. These authors postulated that human milk contains an immunoglobulin which neutralizes poliovirus in the lumen of the infant's gastrointestinal tract. This theory is supported by the demonstration that secretory IgA, the main immunoglobulin in human milk, prevents the adherence of viruses to epithelial cells.² There is only indirect evidence that secretory IgA in human breast milk plays a protective role against bacterial infection. Breast milk contains antibodies

against most bacterial pathogens affecting the neonate.³

In addition to immunoglobulins, breast milk contains other host resistance factors. They include lactoferrin, lysozyme, anti-staphylococcal factor, C₄ and C₃ complement proteins, lactoperoxidase, a growth factor of *Lactobacillus bifidus*, and several lipids with antiviral activities.⁴ The study of cellular components of human breast milk has resulted in a better understanding of host defense mechanisms afforded by this type of feeding. Colostrum contains between one and three million leukocytes per milliliter. Monocytic phagocytes account for the majority of these cells. The remainder (10%) is comprised of lymphocytes which include both T and B cells. Human milk B cells contain IgA, IgM and IgG surface immunoglobulins. Specifically synthesized T lymphocytes may convey to the infant a selective quota of the mother's own cell-mediated immune capabilities. Milk lymphocytes and macrophages interact allowing phagocytosis and killing of bacteria by the latter.⁵

Experimental studies also suggest that a maternal transfusion of macrophages via breast milk helps develop the infant's own monocyte macrophage system of immunocompetence. Human milk also contains a polypeptide, which stimulates the development of intestinal mucosa.⁶ This may provide factual evidence to anecdotal reports of greater digestive capability among breast-fed infants.

While the anti-infective properties of human breast milk cannot be disputed, its nutritional value for the feeding of premature infants has not been firmly established. The age-old controversy as to whether human milk or artificial formula provides the optimal nutrition for premature infants remains unsettled.⁷ The key unresolved issue is the lack of proper definition as to what constitutes optimal nutritional management of premature infants.

A number of previously unrecognized nutritional advantages have recently been identified in human breast milk. Human milk differs significantly from cow's milk in the quality and quantity of its protein constituents. Although human milk has only one-third-to-one-fourth the protein concentration of cow's

milk, the individual amino acids found in human milk provide far superior nutritional values. For example, cysteine, an essential amino acid for preterm infants, is found in higher concentrations in human milk than in cow's milk.⁸ It has also been demonstrated that breast fed-infants have higher serum concentrations of taurine, another amino acid that premature infants are unable to synthesize.⁹ Taurine has also been found in high concentrations in the developing brain of most animal species studied. It has been known for a long time that human milk lipids are more easily absorbed than lipids in cow's milk, and that they minimize the physiologic steatorrhea of preterm infants. It has also been demonstrated that the gastrointestinal absorption of iron, calcium, and zinc appears to be greater in breast-fed infants than in those who are fed commercial formulas.¹⁰

HUMAN BREAST MILK BANKING

The lack of published information on human breast milk banking demonstrates the need for experts in different fields to develop a protocol which can ensure a quality product. To accomplish this, an Advisory Board to the Eastern Oklahoma Perinatal Center (EOPC) Regional Breast Milk Bank was formed to formulate policies and procedures concerning donor screening, collection, storage techniques and quality control.

DONOR SCREENING

Prospective donors are interviewed by the EOPC Breast Milk Bank Coordinator to obtain the following information: intake of drugs, smoking and drinking habits, and previous history of TB, syphilis or hepatitis. A serologic test for hepatitis B and a PPD, when there is a history of TB, are included in the screening process. Prospective donors are excluded if they smoke heavily (more than 20 cigarettes a day), regularly drink alcoholic beverages or those containing caffeine, or take any medication other than an occasional aspirin tablet. Milk is also not accepted if the donor or her nursing are sick.

MILK COLLECTION, STORAGE, AND TREATMENT

Human breast milk is seldom sterile even when collected under strict aseptic conditions. Frequently, human milk is contaminated

with saprophytic organisms which belong to the maternal skin flora. A major hazard is the contamination by pathogenic bacteria introduced by the collection technique. Indeed, an outbreak of salmonellosis occurred (in a neonatal intensive care unit) secondary to human milk contaminated by *Salmonella kottbus*.¹¹

Methods of milk collection include manual expression, rubber-bulb pump, Lloyd B pump, and electric pumps. Rubber-bulb pumps, which are frequently used by hospitals, have been found to increase the risk of contamination. In one study 47% of the samples collected by means of a rubber-pump yielded bacterial colony counts above 10,000 organisms/ml including pathogenic bacteria such as *Pseudomonas aeruginosa* and *Staphylococcus aureus*.¹²

Lloyd B and electric pumps, whose components are easily sterilizable, are preferred in a hospital setting. We use Lloyd B pumps. For the voluntary donor at home, manual expression is the method of choice and was selected for our donors.

Storage and mode of preparation can substantially affect the in vitro biologic activities of human milk. Milk stored in plastic containers yields a higher retrievable leukocyte cell count than that stored in glass bottles because white blood cells adhere to glass.¹³ We have, therefore, selected sterile plastic containers for our donors. Although fresh milk is optimal, if it is not used within 24 hours it must be either frozen or autoclaved. Heat treatment, which eliminates the hazard of bacterial contamination, destroys heat-labile substances (antibodies, complement fractions, enzymatic activities) and milk leukocytes. It also modifies milk fat in such a way that fat absorption decrease by one-third.¹⁴

For human milk banking purposes freezing remains the preserving method of choice. Freezing inhibits bacterial growth and preserves most of the antimicrobial properties of unprocessed human milk.^{15, 16} Human milk is stored in our bank at -18°C to -23°C (0°F to -10°F) for a period of three months.

BACTERIOLOGIC QUALITY CONTROL

After reviewing the pertinent literature,^{12, 17, 18} the EOPC Regional Breast Milk Bank Advisory Board adopted the following procedure: random cultures of milk are taken

for each batch brought to the bank. A batch is defined as all bottles from the donor brought at one time. A batch of milk is available for feeding if the culture shows no gram negative bacteria and counts of *Staphylococcus epidermis* of less than 10,000 organisms/ml and/or *Staphylococcus aureus* less than 4,000 organisms/ml.

POTENTIAL RISKS OF BANK MILK

In addition to infection, other potential risks need to be considered. Milk from genetically different mothers could produce an immune reaction in an immunologically immature infant, but this risk remains theoretical.¹⁹ Environmental pollutants such as polybrominated biphenyls (PPB), which tend to concentrate in human milk, could affect infants in cases of massive accidental contamination.²⁰

PRACTICAL CONSIDERATIONS

Prospective voluntary donors are recruited with the help of local breast feeding and prepared childbirth organizations (LaLeche League, Nursing Mothers Council, Child and Family Life, Childbirth Educators Association, and American Society for Psychoprophylaxis in Obstetrics).

The Bank Coordinator reviews with each donor the adopted collection techniques which are detailed in printed instructions given to donors. Providing a system of transporting milk to the bank is an essential aspect of the program. A voluntary transport network has been established, drop-off points have been identified, and an educational program is provided to all transporters which emphasizes ways to minimize bacterial contamination of milk.

Certified by the American Academy of Pediatrics, George P. Giocoia, MD, was graduated from Buenos Aires University School of Medicine in 1961. He is presently associate professor of pediatrics at the University of Oklahoma Tulsa Medical College. He is a member of the American College of Obstetricians and Gynecologists and chairman of the Oklahoma Committee on Perinatal Health.

Fresh-or-banked breast milk may be of benefit to infants who weigh less than 1500 grams, are allergic to milk, recovering from necrotizing enterocolitis or certain types of abdominal surgery (eg intestinal resection). Because of the potential risk involved, banked human milk is issued only with the informed consent of the parent and upon a physician's written order. There is no charge for banked milk.

Since its inception in June 1979, 46 active donors and 33 transporters have participated in the program. To satisfy the increasing demands by other hospitals, new donors are being recruited.

About six percent of all milk samples collected have been discarded on the basis of bacterial cultures. This figure compares favorably with experience by other breast milk banks in the country.

SUMMARY AND CONCLUSIONS

Recent discoveries have focused on the tantalizing biological properties of human milk. They have prompted the development of breast milk banks in an attempt to "capture" those properties and make them available to those infants whose mothers are unable to provide them with this "living fluid." A host of questions remain unanswered, however, and the following specific areas need further study:

1. Development of uniform standards for breast milk banks
2. Setting criteria for monitoring of nutrient content on foreign substances
3. Definition of circumstances which require the addition of supplemental nutrients
4. Confirmation by control studies of the protective role of human milk in necrotizing enterocolitis and sepsis

Unfortunately there is lack of agreement as to how to measure the ideal growth rate of small preterm infants. Therefore, the advantages of banking of human milk for high-risk premature infants cannot be fully appreciated at this time. Although rigorous scientific proof is not yet available, the beneficial effects of human breast milk—especially when compared with "humanized" cow's milk preparations—cannot be denied.

The EOPC Regional Breast Milk Bank Advisory Board (whose membership list follows) develops the protocol used by the bank: Betty Boyd (March of Dimes-Tulsa Chapter), Jimmie Cash, RNMS (Coordinator), Paula Cunningham (LaLeche), Edwin Farrell, MD (pediatrician), Mary Finley (March of Dimes-Tulsa Chapter), George P. Giacoia, MD (neonatologist), Diane Green (Child Education Association), Donna Heath (Childbirth & Family Life), Delphine Jewell, RNMSN (Maternal Newborn Specialist), Vreni Kemp (Nursing Mothers Council), LaDonna Kertin, RN (Epidemiology Nurse), Lynn Lebowitz (Childbirth & Family Life), Donald Pfeifer, MD (pediatrician), Fred Reynolds, MD (Tulsa City-County Health Department), Shirley Randall (LaLeche), Sally Riley (Bradley), Helen Rumfeldt (Childbirth & Family Life), Stanley Schwartz, MD (Infectious Disease Specialist), Kirstin West (nutritionist).

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Attitudes of Oklahomans Concerning Cancer

JACK L. WHENRY, EdD

Is the state responsible for funding cancer research and control? The average Oklahoman has some strong feelings about this. How should the state obtain the money to fund cancer programs?

While formulating the goals of the Oklahoma Cancer Center, the members of its staff found they were in need of more data in order to make judgements concerning its future. These data were necessary as they were asked to develop cancer related programs by the Board of Trustees of the center as well as by the individual network hospitals, and little research data were available to support proposals and programs.

With the advice and counsel of the Lowe Runkle Company, an Oklahoma-Texas marketing, advertising and public relations firm, a research questionnaire was designed to survey individuals in two major Oklahoma areas. The questions were buried in a survey that would involve other problems within the state, such as banking and news media. A national research firm, Selection Research, Inc., Lincoln, Nebraska, was chosen to conduct the survey.

Within Oklahoma is a mini-community which is used frequently to determine the attitude of Oklahomans. This community consists of twenty-three counties in or near the Oklahoma City metropolitan area, and three counties in or near the Tulsa metropolitan area. In total, 711 individuals responded to the five questions asked; 403 in the Oklahoma City area on March 6, 1978 and 308 individuals in the Tulsa area on April 1, 1978. The questions asked of the respondents were:

1. Which of the following health problems do you feel cost the patient most? Cancer — Heart Disease — Alcoholism — Other

2. Do you feel sufficient money is being made available for cancer research? Yes — No — Don't Know

For cancer treatment? Yes — No — Don't Know

3. If more money were made available, do you prefer that it be used for cancer research or treatment for cancer? Research — Treatment — Both Equal

4. Which of the following do you feel should supervise the funding for the control and management of the cancer problem? Pvt. Indv. — Health Org. — Federal Gov't. — State Gov't. — Insurance Companies — Other

5. Would you favor or oppose a 1¢ per pack tax on cigarettes in Oklahoma to provide money for cancer treatment and research? Favor — Oppose — Don't Care — Don't Know

After the survey was completed, the information was reviewed to determine the at-

attitudes of Oklahomans concerning cancer. An analysis revealed that respondents in both the Oklahoma City and Tulsa areas were consistent in their opinions concerning cancer with one exception; there was some variation in attitudes concerning research. Concerning the question of what the respondents felt the greatest cost for health problems was, cancer was rated at 66% in the Oklahoma City areas and 59% in the Tulsa area. This was when cancer was compared to heart disease, alcoholism, and other illnesses. In response to the question asking if significant money was being invested in cancer research, 55% of the respondents indicated No. A similar question asked whether sufficient money was being made available for cancer treatment, 58% of the respondents indicated No. When the respondents were asked if they would prefer money being spent for research or treatment, 37% in the Oklahoma City area said research; 23% treatment and 40% rated both equal. In the Tulsa area, there was considerable variation with 52% indicating research, 22% treatment and 26% both equal. Respondents were then asked who they felt should supervise funding for the control and management of the cancer problem. Thirty-six percent of the respondents indicated that

TABLE I
RECAPITULATION

OKLAHOMA CITY STUDY
SAMPLE CHARACTERISTICS:

	Frequencies	Percentages
No Answer	1	
Male	177	44%
Female	225	56%
TOTAL	403	100%

Which of the following health problems do you feel cost the patient the most?

Cancer	Heart	Alcoholism	Other
65%	15%	6%	13%

Do you feel sufficient money is being made available for cancer research?

Yes	No	Don't Know
29%	55%	16%

For treatment of cancer patients?

Yes	No	Don't Know
20%	58%	22%

If more money were made available, do you prefer that it be used for cancer research or treatment for cancer?

Research	Treatment	Both Equal
37%	23%	40%

Which of the following do you feel should supervise the funding for the control and management of the cancer problem?

Private Individuals	Health Organization	Federal Gov't.	State Gov't.	Insurance Companies	Other
21%	36%	18%	9%	6%	10%

Would you favor or oppose a 1¢ per pack tax on cigarettes in Oklahoma to provide money for cancer treatment and research?

Favor	Oppose	Don't Care	Don't Know
83%	14%	2%	1%

Survey conducted by Selection Research, Inc., Lincoln, Nebraska, March 6, 1978.

TABLE II
RECAPITULATION

TULSA STUDY
SAMPLE CHARACTERISTICS:

	Frequencies	Percentages
No Answer	0	
Male	131	43%
Female	177	57%
TOTAL	308	100%

Which of the following health problems do you feel cost the patient the most?

Cancer	Heart Disease	Alcoholism	Other
59%	18%	10%	13%

Do you feel sufficient money is being made available for cancer research?

Yes	No	Don't Know
38%	43%	18%

For treatment of cancer patients?

Yes	No	Don't Know
26%	49%	24%

If more money were made available, do you prefer that it be used for cancer research or treatment for cancer?

Research	Treatment	Both Equal
52%	22%	26%

Which of the following do you feel should supervise the funding for the control and management of the cancer problem?

Private Individuals	Health Organizations	Federal Gov't.	State Gov't.	Insurance Companies	Other
21%	31%	27%	8%	5%	8%

Would you favor or oppose a 1¢ per pack tax on cigarettes in Oklahoma to provide money for cancer treatment and research?

Favor	Oppose	Don't Care	Don't Know
82%	12%	2%	4%

Survey conducted by Selection Research, Inc., Lincoln, Nebraska, April 1, 1978.

health organizations should do this with only 18% recommending the federal government, 9% state government and 6% insurance com-

Jack L. Whenry, EdD, was graduated from Indiana University in 1970. He is associate director of the Oklahoma Cancer Center and a member of the American Society for Hospital Education and Training, the Association of Schools of Allied Health Professions, the Society for Public Health Education and the American Association for Cancer Education.

panies. A last question was asked on whether Oklahomans would favor taxing cigarettes for cancer research and treatment. A whopping 83% indicated they would support this. (See tables I and II for recapitulation of survey results.)¹

In summary, Oklahomans feel that cancer is the health problem which is the most costly, that insufficient funding is being made available for both cancer research and treatment and that if additional funding were available, it should be spent in research to find a cure for cancer with funding also going to treatment. They feel that private health organizations should supervise the funding for the control and management of cancer problems and that taxing cigarettes would be one method of obtaining the necessary funds.

¹Survey conducted by Selection Research, Inc., Lincoln, Nebraska 68506, March 6, 1978 and April 1, 1978.
This effort supported by a grant from the National Cancer Institute, National Institutes of Health, Bethesda, Maryland 20014. Support for Cancer Research Center, PO1CA19437.

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Continuing Education for Physicians

DAVID C. MOCK, MD

Societal expectations have made it necessary for physicians to document their ongoing educational activities. The flexibility of the Physician's Recognition Award makes it an advantageous vehicle for the purpose utilizing criteria developed within the profession.

By tradition, physicians have always demonstrated their interest and concern toward keeping abreast of developing medical knowledge. It may be expressed informally in the reading of professional journals or by assuming educational responsibilities for students and junior colleagues. Teaching is a two-way street! More formally, it may range from the reading of a brief paper at a local professional gathering to the presentation of a formal lecture at a national meeting. It is really hard to find a medical meeting which does not include a scientific presentation of some kind. Medical schools and specialty societies have also fostered continuing education through the sponsorship of seminars, clinics, and formal courses designed to disseminate the best current knowledge to the members of our profession.

Recently, with the rise of "consumerism," there has been a growing demand that physicians substantiate these activities—activities which the vast majority of us have been long accustomed to doing for our personal satisfaction. In some states documentation of this sort has been imposed as a condition for relicensure, needlessly creating feelings of rancor along the way. In Oklahoma we have been more fortunate and can take pride in the fact that the profession itself, acting voluntarily through our Oklahoma State Medical Association, has established its own standards in this regard.

In essence, the association has simply asked that its members report every third year on their learning experiences, and has adopted the criteria of the "Physician's Recognition Award" as a fair and reasonable standard. To remain in good standing in the association a member must accumulate a total of 150 hours of credit during a three-year period. Of these, at least sixty hours need be in Category 1; the remaining ninety hours may be earned in the other less formally structured areas.

There is often some confusion about the terms, "accreditation" and "sponsorship." An accredited organization or institution is one which has been inspected by the Liaison Committee on Continuing Medical Education (or more recently by the Committee on Accreditation of Continuing Medical Education of the American Medical Association) and which has

been authorized to produce Category 1 programs itself, or to act as a cosponsor with another group or organization to produce programs which may then qualify for Category 1 credit. Like medical school accreditation, it is an approach to quality control. At the present writing, Saint John's Hospital in Tulsa and the Office of Continuing Medical Education for Physicians in the College of Medicine at Oklahoma City are the two bodies accredited in Oklahoma to offer cosponsorship. Various specialty organizations and other institutions are authorized to sponsor Category 1 programs within their own group, but may not act as cosponsors with other groups.

COSPONSORSHIP

Cosponsorship of a program imposes several requirements upon the participating parties. A joint planning session between the cosponsor and the group wishing to produce the program must be held, at which time the specific goals and purposes of the program are identified together with some means of assessing how well these goals are achieved. It is often appropriate to review previous endeavors of a similar kind

David C. Mock, MD, was graduated from Hahnemann Medical College and is certified by the American Board of Internal Medicine. He is associate dean for postdoctoral education and professor of medicine at the University of Oklahoma Health Sciences Center. Doctor Mock is a Fellow of the American College of Physicians.

and to evaluate the accomplishments of these. Inasmuch as the cosponsor is held responsible for the quality control of the program, a representative from the accredited body must participate in the program as an instructor or as an observer.

At first reading this may all seem a little cumbersome and complicated. It really isn't, but it does take time and planning is required well in advance of the intended meeting date. Consulting with the cosponsor frequently makes the planning easier. Continuing education directors have usually accumulated considerable expertise and have back-up personnel who are capable of attending to the many details necessary in producing a successful program.

CATEGORY 2 PROGRAMS

Sometimes it is not feasible to fulfill all of the requirements for cosponsorship of a planned program. In such instances, one should not overlook the possibility of producing the program as a Category 2 effort. Such a program can have equal educational value for the participants without the additional effort required for audit and evaluation. The Physician's Recognition Award accepts up to 45 hours in this category.

Finally, it is worth remembering that personal education is the real goal of all our efforts. The Physician's Recognition Award does nothing more than provide a convenient framework within which a physician can put in place his educational pursuits for visible documentation.

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Program Coordinators: Doctors McClure L. Smith
and Donald K. Rahhal

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CONTRAINDICATIONS Use in Newborn or Premature Infants. This drug should not be used in newborn or premature infants.

Use in Nursing Mothers. Because of the higher risk of antihistamines for infants generally and for newborns and premature infants in particular, antihistamine therapy is contraindicated in nursing mothers.

Use in Lower Respiratory Disease. Antihistamines should NOT be used to treat lower respiratory tract symptoms including asthma.

Antihistamines are also contraindicated in the following conditions: hypersensitivity to azatadine maleate and other antihistamines of similar chemical structure; monoamine oxidase inhibitor therapy (See DRUG INTERACTIONS Section).

WARNINGS Antihistamines should be used with considerable caution in patients with: narrow angle glaucoma, stenosing peptic ulcer, pyloroduodenal obstruction, symptomatic prostatic hypertrophy, bladder neck obstruction.

Use in Children. In infants and children especially, antihistamines in overdosage may cause hallucinations, convulsions or death.

As in adults, antihistamines may diminish mental alertness in children. In the young child, particularly, they may produce excitation.

OPTIMINE TABLETS ARE NOT INTENDED FOR USE IN CHILDREN UNDER 12 YEARS OF AGE.

Use in Pregnancy. Experience with this drug in pregnant women is inadequate to determine whether there exists a potential for harm to the developing fetus.

Use with CNS Depressants. Azatadine maleate has additive effects with alcohol and other CNS depressants (hypnotics, sedatives, tranquilizers, etc.).

Use in Activities Requiring Mental Alertness. Patients should be warned about engaging in activities requiring mental alertness, such as driving a car or operating appliances, machinery, etc.

Use in the Elderly (approximately 60 years or older). Antihistamines are more likely to cause dizziness, sedation, and hypotension in elderly patients.

PRECAUTIONS Azatadine maleate has an atropine-like action and, therefore, should be used with caution in patients with a history of bronchial asthma, increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension.

DRUG INTERACTIONS MAO inhibitors prolong and intensify the anticholinergic (drying) effects of antihistamines.

ADVERSE REACTIONS The most frequent adverse reactions are underlined.

General: Urticaria, drug rash, anaphylactic shock, photosensitivity, excessive perspiration, chills, dryness of mouth, nose, and throat.

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Hematologic System: Hemolytic anemia, thrombocytopenia, agranulocytosis.

Nervous System: Sedation, sleepiness, dizziness, disturbed coordination, fatigue, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, euphoria, paresthesias, blurred vision, diplopia, vertigo, tinnitus, acute labyrinthitis, hysteria, neuritis, convulsions.

Gastrointestinal System: Epigastric distress, anorexia, nausea, vomiting, diarrhea, constipation.

Genitourinary System: Urinary frequency, difficult urination, urinary retention, early menses.

Respiratory System: Thickening of bronchial secretions, tightness of chest and wheezing, nasal stuffiness.

OVERDOSAGE Antihistamine overdosage reactions may vary from central nervous system depression to stimulation. Stimulation is particularly likely in children. Atropine-like signs and symptoms (dry mouth; fixed, dilated pupils; flushing, and gastrointestinal symptoms) may also occur.

If vomiting has not occurred spontaneously, the patient should be induced to vomit. This is best done by having him drink a glass of water or milk after which he should be made to gag. Precautions against aspiration must be taken, especially in infants and children.

If vomiting is unsuccessful, gastric lavage is indicated within three hours after ingestion and even later if large amounts of milk or cream were given beforehand. Isotonic and 1/2 isotonic saline is the lavage solution of choice.

Saline cathartics, such as milk of magnesia, draw water into the bowel by osmosis and therefore are valuable for their action in rapid dilution of bowel content.

Stimulants should not be used.

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GOAL: Shared Access to Medical Literature

KAREN T. HACKLEMAN

Fifteen institutions in the greater Oklahoma City area were recently awarded a National Library of Medicine consortium grant to strengthen library collections locally and to encourage resource sharing among all health-related institutions.

The hospital librarians in the Oklahoma City area are a vibrant active group concerned at all times with the continuing education of the Oklahoma physician and the continual improvement of the hospital library.

On June 25, 1979, the National Library of Medicine (NLM) and the Department of Health, Education, and Welfare (HEW) gave official notification that a resource grant had been awarded to the members of the Greater Oklahoma City Area Health Sciences Library (GOAL) Consortium.

The amount of the grant was \$15,310; most of which will comprise the salary for a half-time professional medical librarian to conduct a needs' assessment survey. The survey will be aimed at collection development for hospital libraries which lack adequate core titles and journal holdings and partly to train in-

experienced library managers in correct library procedures.

Why is collection assessment necessary? Management of a collection includes not only a workable "weeding" process but a selection policy which adequately reflects the needs of all users: doctors, nurses, technicians, administrators, dietitians, pharmacists, therapists, to name a few: a user population which varies from hospital to hospital. Not all editions of a core text nor long runs of journal titles are mandatory for hospital libraries; collection "building" is the responsibility of the resource libraries of our nation. The objective of the hospital library is to maintain current information, as medical literature is vital to research, teaching, patient care and continuing education.

The subject emphasis of the collection also changes from time to time, generally, when new services are added or deleted. Changes of administration also affect the status of the hospital library, for example, the passage of legislation or organizational restructuring. Frequently, because hospital libraries do not generate funds, they are not high on the list of priorities. Why not? Our national parks and monuments, highways, and utilities constantly require funding for maintenance of service. Medical libraries provide a direct link in communication transfer at minimal cost. The effort on the part of each participating hospital librarian in GOAL is our attempt to keep this information free and accessible.

Hospitals involved in teaching programs must adjust library acquisitions to satisfy users at various levels. For example, information requested by a student in surgery can usually be satisfied by providing a basic surgery text such as the ones authored by Schwartz or Sabiston. The same student as a resident has more concentrated needs and becomes increasingly more dependent on journal literature. When entering a specialty, the resident is expected to be familiar with a deluge of specialty information as well as comprehensive coverage of a single system or complicated disease state. Within teaching programs, then, one document does not serve all users equally.

Specialized procedures performed in one hospital may not necessarily be performed in another; therefore, the percentage of documents is dictated by subject or system; ie, burn, heart, head and neck, neonatal care, diabetes, etc. The subject may remain constant, but the user may have a specialized interest. For example, in the treatment of diabetes mellitus, the anesthesiologist is definitely concerned with the side-effects of drugs, whereas the surgeon is most interested in follow-up or complications resulting from the surgery. Perfusionists are concerned with reliability of equipment during aortocoronary bypass procedures, whereas the dietitian will

be concerned with cholesterol levels. The patient's physical needs, emotional condition, religious affiliation and clinical treatment must all be considered before assessing a selection policy for the hospital library. The basic core collection is advantageous to all libraries regardless of size; however, the percentage of supportive information will depend on the various services performed and the strength of the programs.

In relationship to the assessment survey, the resource grant defends in-depth speciality collections, such as those needed for burn care, genetic research, newborn intensive care, obstetrics and gynecology, ophthalmology, cerebral palsy, and others. The resulting appraisal will reveal the strengths and deficiencies in the holdings of each member library and will include suggestions for improving specialty holdings.

Above all, the grant encourages cooperative service among the 15-participating organizations and will alleviate excessive costs (including inter-library loan and photoduplication) — burdens now placed on larger institutional libraries. Expanded services for the entire membership will include a journal exchange program, a listing of new acquisitions, wider circulation of journals and monographs, and training programs for all consortium members. Through cooperative effort, the resources of all hospital libraries in this area will be equally accessible to one another.

Full endorsement of the "resource improvement support" has been given by NLM and the Regional Medical Library Program. The grant will be administered by Presbyterian Hospital through Project Director, Ms Dorothy Williams.

Consortium members welcome suggestions from their attending staff physicians and appreciate the administrative support which has made this venture possible.

Midcontinental Regional Medical Library Program, Library of Medicine, 42nd and Dewey Avenue, Omaha, Nebraska 68105.

Karen T. Hackleman received her MLS degree from the University of Oklahoma in 1978. She is head of the Educational Programs of the Midcontinental Regional Medical Library Program at the University of Nebraska Medical Center and formerly was medical librarian for the department of surgery at the University of Oklahoma Health Sciences Center. She is a member of the Medical Library Association, the American Medical Writers Association and the Oklahoma Health Sciences Librarians Association.



News From The Oklahoma State Department of Health

A survey of sexually active teenage girls conducted in 1979 by the Oklahoma State Department of Health in cooperation with the Oklahoma University College of Health revealed that more than half were risking an unwanted pregnancy. This survey, done at participating county health departments, involved asking teenagers seeking pregnancy tests to complete a three-page questionnaire while awaiting their test results.

The results revealed that over half of the young women, ranging in age from 13 to 19, had become sexually active by age 15. It was quite common (57 percent) for a young woman to have had more than one partner.

In spite of the increased openness in today's society regarding sexuality, teenagers have

apparently not become more aware of the risks of sexual intercourse. Fifty-eight percent of the young women surveyed were risking an unwanted pregnancy (ie, neither seeking pregnancy nor using contraceptives).

Of the 302 girls who risked unwanted pregnancy, almost half (47 percent) said they didn't use contraceptives because they "didn't expect to have sex." Twenty-seven percent didn't think they could become pregnant. Many teenagers believe they are too young to get pregnant or that they don't have sex often enough to be at risk. The third most common reason given for not using contraceptives was that the girls were unwilling to ask their parents for consent (26 percent).

Of the almost 10,000 babies born to Oklahoma teenagers each year, an estimated 36 percent are unintended. Additional information, including specific data by county, regarding teenage pregnancy in Oklahoma and the teenage pregnancy survey may be obtained by contacting the Maternal and Child Health Service, Oklahoma State Department of Health, at 405 271-4476. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR FEBRUARY, 1980

DISEASE	February 1980	February 1979	January 1980	Total To Date	
				1980	1979
Amebiasis	5	3	—	5	3
Aseptic Meningitis	3	1	3	6	2
Brucellosis	—	—	—	—	—
Encephalitis, Infectious	—	1	—	—	1
Gonorrhea (Use Form ODH-228)	941	972	1362	2303	2094
Hepatitis A	35	13	18	53	18
Hepatitis B	17	5	14	31	8
Hepatitis Unspecified	25	11	12	37	13
Measles (Rubeola)	—	1	1	1	1
Meningococcal Infections	3	4	1	4	6
Pertussis	1	—	2	3	—
Rabies (animal)	13	17	14	27	28
Rocky Mountain Spotted Fever	—	—	—	—	—
Rubella	—	4	—	—	4
Rubella (congenital)	—	—	—	—	—
Salmonellosis	13	14	17	30	26
Shigellosis	16	15	10	26	26
Syphilis (Use Form ODH-228)	8	3	7	15	10
Tetanus	—	—	—	—	—
Tuberculosis	26	50	23	49	71
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—

Floyd F. Miller, MD, New OSMA President

Pictured on the front of this month's *Journal* is Floyd F. Miller, MD, Tulsa, the new president of the Oklahoma State Medical Association. Doctor Miller is a 1956 graduate of the University of Oklahoma School of Medicine and specializes



in the treatment of allergy. He is Board certified in Internal Medicine and Allergy. Doctor Miller is a former president of the Tulsa County Medical Society, former president of the Oklahoma Society of Internal Medicine, former president of the Oklahoma Allergy Society, and has served as a member of the House of Delegates of the American Society of Internal Medicine. He is married to Mary Adeline Miller, and they have two sons, Michael and Steven. Doctor Miller is the 75th president of the OSMA. □

OMPAC Seeks More Strength Through Membership Drive

"It is truly a rewarding experience to attend a meeting of the Oklahoma Political Action Committee and see physicians from all areas of the state including the most rural communities and the most urban metropolises working together to choose those individual candidates whom they perceive to be best qualified for election to our state and national positions," says Jack W. Parrish, MD, OMPAC vice-president.

Results of previous elections have proven the significance of OMPAC's influence. The organization is currently involved in a membership drive to increase its effectiveness in influencing the 1980 elections.

The vice-president said that each year many legislative problems arise which require a strong stand by medical professionals. He says OMPAC serves as a mechanism through which a more unified and powerful voice can be heard in relation to what can be done on an individual basis. Since medical associations are not permitted to support candidates financially OMPAC also functions as a non-profit organi-

zation through which physicians can legally make financial contributions to candidates.

Candidates who are supported by OMPAC are chosen by the group's twenty-nine-member Board of Directors after considering surveys and letters of recommendations from OMPAC members. Parrish said OMPAC decisions are made by representatives from over the state who try to choose candidates who have demonstrated concern for the basic principles of free enterprise, and minimal government intervention and who have a reasonable chance for election.

"OMPAC members have shown an uncanny ability to pick winners. Their ability to perceive those candidates who will, when elected, continue to support the basic principles of private and personal medical care has been superior," Parrish remarked.

The OMPAC membership drive has been doing well, but more response would increase OMPAC's effectiveness in medical politics in the upcoming elections.

Several types of memberships are available to physicians and their spouses. Last year the OSMA House of Delegates established a "200 Club" to encourage OSMA members to contribute \$200. Other forms of membership are the sustaining membership for contributions of \$100 and regular membership for contributions of \$20. □

Physicians Indicate Interest in Oklahoma

A number of physicians from outside the state are showing increased interest in practice opportunities in Oklahoma. It is now the responsibility of the Physician Manpower Training Commission to work with these physicians and attempt to recruit them to the state. Physicians who are interested in moving to Oklahoma normally provide the Commission with a copy of their curriculum vitae as well as information about desired practice conditions (size of city, part of state). □

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Commissioner's Ambition Is Serving Many People

The ambition of Joan Leavitt, MD, Commissioner of Health, was to provide services to people — lots of them — and it was from this desire that her interest in public health was born.

Doctor Leavitt, a native of Boston, was graduated from the Boston University School of Medicine in 1953, where she specialized in pediatrics. Her first introduction to public health came when, as a medical student, she made house calls in low-income areas of Boston. Later, during her residency, she also worked in public health clinics. It was during this time that she developed her commitment to preventive medicine and public health in general.

"In public health, as compared to private practice, you have the advantage of reaching more people with your services," she said.

After completing her residency, she opted for Oklahoma, instead of choosing to work in a more metropolitan area. She chose this state nearly 20 years ago, after coming here to visit friends.

"I liked it so I stayed," she continued. "Oklahoma is a fascinating country. It's interesting because of its great variety and, of course, I like the people, too."

While living in Oklahoma, Doctor Leavitt has devoted herself to public health. She acquired 18 years of experience in public health at various locations throughout Oklahoma before assuming her current position as Commissioner of Health for the State of Oklahoma in 1976.

Public health in Oklahoma encompasses a vast number of areas and affects the life of everyone in the state to some degree. This makes it one of the most far-reaching of the state agencies. Many people are unaware of the many responsibilities vested in the state health department. Doctor Leavitt said this is often overlooked by the public. "Few people can go through a day without being influenced to some extent by decisions made at this agency. Such responsibility ultimately affects the food



people eat and the air they breathe. They don't even go to sleep at night without being affected by us through our mattress inspection program," the Commissioner said.

She also stated that quite often the public seems to be most aware of the department's lesser responsibilities. "Quite often we receive complaints about restaurants and weeds in the alley and yet never hear about some of the more complex and significant issues."

Oklahoma has approximately 60 local health departments across the state. In these units, about 200 physicians serve in some capacity and 15 of them are employed on a full-time basis.

The part-time physicians usually contract their services. Leavitt said most of the health department's medical needs are being filled through the current contractual system. However, she said a physician shortage is prevalent in the area of psychiatry.

Many of the services provided by the health department are supplemented with an education program about the service and the problem for which the service was created. But the Commissioner says a greater emphasis must be placed on health education by the department in order to promote full utilization of all available public health services.

She believes that the recently established Oklahoma Health Education Advisory Council will make a positive contribution in this area. She said the Council could also be of assistance in isolating specific community health problems.

Leavitt went on to say that each service offered by the health department involves the delivery of important services to the public. However, she admits her favoritism toward one particular area, the Women, Infants, and Children Nutrition Program (WIC), which was initiated three years ago. Her interest in WIC stems from the fact that the program underwent considerable expansion when she was chief of the Maternal and Child Health Service prior to becoming commissioner.

This program offers food vouchers and nutrition education services to women and children who are not receiving a proper diet. WIC is limited to lactating women and children up to five years of age. The children included are those whose growth is inappropriate for their age, who are anemic, or who have a history of frequent infections. The food vouchers available through this program enable the recipients

to purchase only food items with high nutritional value.

"The WIC program is a perfect example of preventive medicine and the number of patients are increasing constantly," Doctor Leavitt added.

The US Department of Agriculture has channeled approximately \$8 million into Oklahoma for this program during fiscal year 1980. This budget will support nearly 22,000 nutritionally-at-risk individuals.

Doctor Leavitt stated that the health department budget is approximately \$442 million. About one-third of this, she said, comes from state appropriations with the remainder being federal monies and fees collected by the department.

Leavitt said public health and preventive care services and programs are the entry point into the health care system for many people. Her goal for the new decade will be the promotion of public health as a logical part of the health care delivery system in Oklahoma.

"We need to offer more health care programs to make the citizens aware of public health, to join in improving the quality of existing health care, and to maintain a sense of wellness among individuals, rather than illness. Perhaps we need to redefine the health department's traditional role and help it become an alternative provider to meet the primary health needs of communities across the state." □

Critical Medical Problems In Refugee Camps

Medical professionals working as volunteers in Cambodian refugee camps in Thailand are experiencing heavy workloads and witnessing severe medical problems among the refugees. Most recent volunteers are unfamiliar with tropical diseases and their need to learn proper treatment has added to everyone's workload.

Keith Dahlberg, MD, is a medical volunteer at the Maesarian Christian Hospital in Maesariagn, Thailand. He has submitted an article to *The Journal of the American Medical Association* explaining some of the camp's critical medical problems.

Dahlberg's camp opened late in 1979 and within one week he said 32,000 refugees came for medical help. He says the greatest medical problem is starvation. Other prominent problems include marasmus, kwashiorkor, beriberi and anemia. Dahlberg said many of the patients are suffering from all four of these conditions.

The physician said medical teams must be especially cautious in their treatment of malnutrition because over-zealous efforts to refeed and rehydrate can cause sudden death. He says malaria is the next most prevalent disease among refugees and that the most common disease afflicting children is marasmus, a deficiency of calories. Dahlberg said patients suffering from this disease usually have skin hanging in folds on their bodies, skull-like facies and arms and legs that are the diameter of a thumb.

The doctor said many of the refugees have digestive disturbances caused by kwashiorkor. The disease often affects children who have been weaned to a high starch diet. Dahlberg said the anemia problem is being treated with iron therapy and blood transfusions. □

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Respiratory Distress Is Common In High-Risk Infants

Respiratory distress should be anticipated among high-risk infants according to a recent article in the *Journal of the American Medical Association*. The article also explained various causes producing respiratory problems.

The AMA article said respiratory difficulties are a possibility after the delivery of any infant but that such problems should be anticipated in high-risk infants including those who are born prematurely following a difficult labor and those born by caesrean section or by a diabetic mother.

One of the most common difficulties is wet lung disease, but it usually clears up within a few days.

Some infants have meconium-stained amniotic fluid which often develops into meconium aspiration syndrome and respiratory distress. These conditions have the potential for causing bacterial pneumonia.

Hyaline membrane disease is a respiratory problem with a significant mortality rate. The article said, however, that ventilation in inten-

sive care units for newborns has helped to reduce the death rate among infants suffering from this problem.

Infants of diabetic mothers often develop cardiomegaly, a condition featuring an enlarged heart and deposits of glycogen in the heart muscle. Other infants of diabetic mothers may acquire hepatosplenomegaly.

The article said that some of these respiratory distress problems among infants can be treated surgically, but that all of them must be recognized and promptly corrected. ☐

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Marijuana Relieves Patients

Some patients suffering severe nausea and vomiting from refractory chemotherapy have found relief in marijuana.

Researchers at Duke University Medical Center administered the principal active ingredient of marijuana, tetrahydrocannabinol (THC), to more than fifty patients who became ill after receiving drug therapy for cancer and after the basic medication to control vomiting failed to work.

According to a report, three-fourths of the patients benefitted from THC. Ten patients had no further nausea, 28 had a fifty percent reduction in nausea and vomiting and the remaining 28 percent were not helped.

The report also said that patients who were helped by THC felt somewhat "high" but that toxic reactions were generally mild and only four patients had reactions that required stopping the THC therapy.

THC was issued to the patients in capsule form through the government's National Institute of Drug Abuse. The report said that THC

is difficult to obtain even for research purposes. □

Will Limited Funds Cause Medical Practice To Deteriorate?

Could limited funds in medical research cause the practice of medicine to decline?

Lawrence D. Grouse, MD, PhD, and senior editor of the *Journal of the American Medical Association* says that President Carter's 1981 budget increase for the National Institutes of Health (NIH) is not sufficient. He says the funds which have been increased by only four percent will not meet the financial pressures for medical research. He explained that research is the scientific base of medicine and that if it is eroded the practice of medicine could deteriorate.

Grouse said Carter and Congress have been supportive of NIH programs in the past but that failure to provide more funds this year will affect the intramural program and cause medical research to suffer. He said he is urging congress to consider enlarging the president's budget for NIH intramural use. □

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Medical School Enrollment Climbs

Total medical school enrollment and the number of graduating physicians increased in 1979 according to a report on medical education published in the *Journal of the American Medical Association*.

The report said medical school enrollment across the nation increased by nearly 3,000 students last year and that the number of new physicians graduating in 1979 rose by four percent. It also said that 2.2 applicants were received for each opening in the freshman class despite a reduction in the number of applications from the previous year.

C. H. William Ruhe, MD, AMA senior vice-president for scientific affairs, said that the trend at both the federal and state level is in the direction of increasing regulation of the medical education system, increasing dictation of the terms of medical education and the content of the curriculum, and increasing regulation of the nature and location of physicians' practices. □

Chemicals Cause Illness

Physicians should give careful attention to patients who believe their illness is work-related says a Maryland physician.

An epidemic of health problems recently broke out among workers in chemical plants in two eastern states. Physicians traced the source of these illnesses to a new chemical used at the plants. It was Dimethylaminopropionitrile — DMAPN, a chemical used in the manufacture of polyurethane, a synthetic substance for commercial use.

Most of the workers complained about bladder problems. A Mayo Clinic physician said this experience should be a lesson to physicians about listening to workers who think their health problems are a result of working conditions.

"This episode underscores the need to consider potential toxicity both of new chemicals and of previously used chemicals introduced into new industrial processes. It also highlights the need for all practitioners to pay close attention to the patient who thinks his illness may be work related," a Maryland physician said. □

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Death

CHARLES H. EADS, MD
1903-1980

Retired, Tulsa gynecologist, Charles H. Eads, MD, died March 8, 1980. Doctor Eads was born in Mount Carbon, West Virginia and was graduated from the University of Oklahoma College of Medicine in 1933. He had practiced in Tulsa since 1935 and was the recipient of the Tulsa County Medical Society's Doctor of the Year award in 1972. In 1971 the OSMA presented Dr Eads with a Life Membership. □

IN MEMORIAM

1979

<i>Floyd T. Bartheld, MD</i>	<i>March 5</i>
<i>Richard L. Harris, MD</i>	<i>March 28</i>
<i>Daniel R. Storts, MD</i>	<i>April 15</i>
<i>Thomas P. Bigbee, MD</i>	<i>April 16</i>
<i>Charles F. Engles, MD</i>	<i>April 21</i>
<i>Richard M. Taliaferro, MD</i>	<i>March 30</i>
<i>Steve H. Baker, MD</i>	<i>March 30</i>
<i>Gerald Bednar, MD</i>	<i>May 2</i>
<i>Howell A. Scott, MD</i>	<i>May 22</i>
<i>Harry B. Stewart, MD</i>	<i>May 31</i>
<i>Walter M. Cox, MD</i>	<i>June 4</i>
<i>Francis W. Pruitt, MD</i>	<i>June 20</i>
<i>Paul M. Vickers, MD</i>	<i>June 26</i>
<i>John H. Robinson, MD</i>	<i>July 30</i>
<i>Marvin Elkins, MD</i>	<i>August 20</i>
<i>Hugh J. Evans, MD</i>	<i>August 25</i>
<i>Caspar A. Hicks, MD</i>	<i>August 27</i>
<i>William R. Schmieding, PhD</i>	<i>September 16</i>
<i>Ernest Lachman, MD</i>	<i>September 21</i>
<i>Walter H. Dersch, Jr., MD</i>	<i>August 26</i>
<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>
<i>Charles H. Eads, MD</i>	<i>March 8</i>

Book Reviews

CLINICAL HYPERTENSION. Second Edition. By Norman M. Kaplan. 405 pages. Williams and Wilkins Company, Baltimore, 1978. Price: \$41.00.

During the past ten years, the medical community has witnessed an explosion of new knowledge and concepts related to hypertension in the medical literature. Continuous expansion and change within this segment of medicine often appears overwhelming to the primary care physician who seeks clinically applicable information. The publication in 1973 of Dr Kaplan's *Clinical Hypertension* proved to be an invaluable resource to the physician dealing with hypertensive patients.

In this second edition five years later, Dr Kaplan has been most successful in reviewing the world literature on hypertension and producing an up-to-date revision with extensive and current reference material. The book addresses all clinically important aspects of hypertension while providing continuity and lack of repetition, the advantages of a one-author text. Doctor Kaplan's easy style, coupled with wit and editorial comment, combine to stimulate further reading. Illustrations, tables, and figures are numerous and combine data from multiple sources in the literature, allowing the reader to compare conflicting data with relative ease.

The first four chapters deal comprehensively with essential hypertension and represent a major emphasis of the book, especially concerning the pathophysiology of this disorder. It was noteworthy to find that systolic hypertension, even in the elderly, is considered a factor that adversely influences survival and warrants treatment. The secondary forms of hypertension are covered individually with suggested guidelines for evaluation and therapy. We found the chapter entitled "Hypertension Related to Pregnancy and the Pill" particularly well-written. It provides an orderly yet succinct discussion of hemodynamic changes in normal pregnancy as well as the basis for understanding the various types of hypertension encountered. In particular, preeclampsia is presented in such a manner that early detection and prompt management are stressed. The observations concerning hypertension induced by oral contraceptives are well-outlined and explain how these compounds interfere with

the assays of the renin-angiotensin-aldosterone system.

Chronic renal disease, possibly the most common form of secondary hypertension, is extensively reviewed. However, the sections on hypertension after kidney transplantation and in the absence of the kidneys may not be clinically applicable for the primary care physician. The last chapter by Dr. Ellin Lieberman deals with hypertension in childhood and adolescence. Although her style contrasts somewhat with that of Dr. Kaplan's, this chapter is an informative addition to the text. Her treatise on the same topic by the CIBA Collection series is much better illustrated.

Kaplan's second edition is certainly one of the finest available texts on hypertension. Physicians and other health professionals would certainly benefit from reading this book. For the practicing physician who lacks the time to peruse the extensive literature on this common clinical problem, it should provide all that is needed to deal with the great majority of hypertensive patients. The text is an example of scientific writing that reads quickly and with ease. The price is somewhat high but in view of the information presented and the importance of hypertension in the daily practice of the primary care physician, the investment should prove worthwhile. *Anh The Nong, MD, Mel Clark, MD, Dennis Andress, MD*

Food: The Gift of Osiris (volume II). By William J. Darby, Paul Ghalioungui, and Louis Grivetti. New York: Academic Press, 1977. pages XXXIII, 453-877, XLII, illustrations, Price \$27.00 (the set).

This is the second volume of this unique and splendid work. As pointed out in the review of volume I, the book will prove to be a remarkable source of information for those interested in nutrition, history of medicine, sociology, and anthropology, as well as Egyptology. The food-stuffs discussed in volume II include grains, bread, alcoholic beverages, aquatic plants, vegetables, fruits, fats and dairy products, and spices and herbs. As pointed out in the preface, these substances are more representative of the staple diet and of the bulk of caloric intake

of the majority of people in Ancient Egypt. As in the first volume, the text is enhanced by tastefully selected illustrations, many of which are in color. The illustrations include maps, photographs, and line drawings. An aspect of considerable interest is the transmission of food habits and attitudes from Ancient Egypt to later ancient peoples, such as the Hebrews, Christians, and Arabs, some of which persist to the present day.

Some fifteen years were involved in conducting the research for this book. The labors of the authors have been justified. It will become a collector's item. *Harris D. Riley, Jr., MD*

Thorne's Better Medical Writing, 2nd Edition. Stephen Lock. London and Toronto: Pitman Medical Publishing Company, 1977, 188 pages. Price not stated.

"Thorne" was a pseudonym used by two members of the editorial staff of the *British Medical Journal* under which articles about medical writing for the *Journal* were written. One of these authors was Lock. This new book on medical writing is actually the second edition of the Thorne text.

The book is intended for physicians who either have not written in medical journals or are relatively inexperienced medical authors. Lock's book deals with various aspects of the publishing process of which writing is only one part. There are also chapters dealing with which journal to send your article, what happens when it has been accepted and what to do if it is rejected. Writing is discussed in four chapters, one of which was written by a collaborator, William Whimster. Lock's three chapters on style are brief and pertinent. The writing of the author and his colleagues is attractive and interesting. It is a good starting point for the physician who wants to learn to write better. Lock suggests that one way to do this is to read good writing and he cites examples of what he considers appropriate material.

Thorne's Better Medical Writing was written primarily for British physicians. However, the author shows he is sensitive to potential authors in North America by including the chapter on American medical journals. Anyone interested in a book on medical writing with a British flavor and one that is pleasurable to read will find Lock's commendable text a worthy source. *Harris D. Riley, Jr., MD*

Nice To Know

Perhaps we are entering an era of sanity — even wisdom.

Through due process, our state association has revoked the mandatory minimum-credit provision for participation in continuing medical education activities of its members. In my opinion, this action deserves the applause of every member of our association, irrespective of personal views regarding the issue. There is one less mandate pertaining to the practicing physician. There is one less record to keep. There is one less intrusion by big brother. And, in this case, less is more; more freedom to exercise our individual preferences; more options in the determination and satisfaction of our individual needs; more pleasure in learning what we as individuals want to learn and in deciding when and where we want to learn it; more efficiency and economy in the complex process of maintaining our individual clinical competen-

cies; more control of our lives, both as private individuals and as physicians.

No longer will we let some committee of "them" determine what, when and where we need to learn. No longer must we keep records and answer a roll-call in order to prove our presence at — if not our participation in — some learning experience. No longer must we strive for gold stars and certificates; we can strive for knowledge.

Perhaps we will stop building jails for ourselves and tempting would-be jailers to seize the keys. Perhaps this outburst of sanity will catch on and spread to other areas of collective activity such as in local and federal governments.

I must admit that the latter proposition is probably irrational. But it's nice to think it's theoretically possible. It's nice to know that insanity is not irreversible. It's nice to know that freedom is not dead. It's nice to know that our organization can learn from its mistakes, can right a wrong and can manifest wisdom. MRJ

Three conferences concerning health care cost containment for Oklahoma business and industry leaders were held this spring. They were sponsored by the Governor's office, and co-sponsored by the Oklahoma Chamber of Commerce, Oklahoma City Chamber of Commerce, Tulsa Chamber of Commerce, and Oklahoma Health Systems Agency. Two of the conferences were held in Oklahoma City, and one in Tulsa. Governor Nigh attended all three sessions, and Congressman Jim Jones spoke at the Tulsa session. Business and industry leaders of our state were present in large numbers, and the Tulsa session was over-subscribed. To say the least, business is interested in reducing the health premiums that they pay for their employees.



The health industry was not asked to participate in the first session. We expressed our displeasure concerning this, and we were invited to have "providers" on the panel of the latter two sessions. Doctor Ed Rice was a panelist in Oklahoma City, and I served on the panel in Tulsa.

The primary thrust of the sessions was to push for alternate health delivery programs, particularly Health Maintenance Organizations. I will restrict my comments to the Tulsa session which I personally attended.

The speakers were health care economists from out of state, and a Minnesota businessman who was an enthusiast for HMO's. There was no disagreement among the panelists that the United States had the best medical care in

the world, but they were concerned that health costs would induce more governmental involvement if alternate means of health care were not provided. The speaker from private industry told of what he considered success with HMO's, because of lower cost.

Congressman Jones, who has been diligent in working against bureaucratic involvement in medicine, was concerned that the health care industry might feel that cost containment pressures were now lessened at the federal level, and stated "nothing could be farther from the truth." He discussed a cost containment provision using competition to control cost, with implementation through the tax code. The provision would place a cap on the amount of employer contribution to employee health care programs and offer workers a choice of health plans. He also felt that catastrophic coverage was still a possible option.

In essence, we heard that cost containment programs, including alternate health care delivery systems, should be provided to prevent further governmental involvement in medicine. This program was being presented to an overflow crowd of conservative businessmen in a conservative city. The "pro-competition" bill as discussed by Congressman Jones would actually increase tax income to the government, and is, therefore, attractive to the Congress. We must be prepared to remind the policy makers of how this country acquired the best health system in the world.

The AMA has held many sessions with the business and industry leaders over the country. Those of us who attended the Oklahoma sessions realize how important this is.

A handwritten signature in dark ink, appearing to read "W. J. Miller, MD". The signature is fluid and cursive, with the letters "W", "J", and "M" being prominent.

Management of Ureteral Stones In a General Hospital

RICHARD N. ISAACSON, MD
WILLIAM L. BARNES, MD
DONALD D. ALBERS, MD

TABLE I

AGE	MALE	FEMALE
10-19	0	1
20-29	5	11
30-39	17	3
40-49	23	3
50-59	16	4
60-69	10	3
70-79	4	0
TOTALS	75	25

One-hundred patients admitted with a diagnosis of ureteral calculi were studied referable to symptoms, laboratory findings, and methods of management. The merits and indications of different methods of management, including observation only, are considered.

Urinary tract stone disease represents a significant medical problem for both patients and practitioners in the state of Oklahoma. This study deals with the hospital management of ureteral calculi, the most common symptomatic form of urinary calculus disease. One hundred consecutive admissions to Presbyterian Hospital with the diagnosis of ureteral calculus were reviewed. The time span included March 1976 to February 1978. The age range and male-to-female ratio are de-

tailed in Table I. In our series, there were 96 Caucasians, three Negroes, and one Oriental.

As can be seen in Table II, the symptoms and signs vary from none to severe with at least 90% having some type of pain. In three cases, the stones were discovered when the patient was being evaluated for some other condition. A prior history of stone disease was noted in 29 of the patients. Complete blood counts were of no diagnostic value in these stone patients. Twenty of the patients had a white blood cell count between 10-and-15,000 per cubic millimeter; only six had a count between 15-and-20,000. The others were normal. None of the patients had a positive urine culture on admission. The serum CPK level was noted to be elevated in 22% of the patients. A previous study revealed mild to marked elevation in many cases with ureteral calculi with negative cardiac studies.¹

Radiographic studies are most important in the diagnosis of ureteral calculi but can be inconclusive due to numerous calcific densities,

From the Departments of Urology, University of Oklahoma College of Medicine, Presbyterian Hospital, and Oklahoma City Clinic, Oklahoma City, Oklahoma.

TABLE II
SYMPTOMS AND SIGNS

Pain	90
CVA or Flank Tenderness	60
Microscopic Hematuria	51
Negative Physical Exams	40
Positive History of Stones	29
Nausea or Vomiting	20
Gross Hematuria	13
Dysuria	11
Other Lower Tract Symptoms	10
Fever	7
Urinary Tract Infection	3
No Symptoms	3

such as phleboliths or vascular calcifications, and the poor density of some calculi. In this series of 100 admissions for ureteral calculi, intravenous pyelograms (IVP) were done in the hospital in 88 cases; 60 showed some degree of obstruction; a stone was definitely seen in 63. Ten patients had normal IVPs without stones being reported; however, in six of these, stones were recovered. Of the twelve patients who did not have an in-hospital IVP, stones were recovered in ten. Some of these stones could be identified on the original x-ray only after postoperative KUBs were compared.

The ultimate dispositions of these patients were arranged in six groups. (Table III) Almost one-fourth of these patients had little in the way of treatment. The courses were quite variable but most patients were considered candidates for intervention or they would not have been admitted. However, most ureteral stone cases probably never get to the hospital. Successful stone manipulation allows a short stay in the hospital and therefore is limited to smaller distal stones. Of the 54 patients in whom manipulation was attempted, 78% had successful stone extractions. This compares favorably to a study done several years ago at the Mayo Clinic.² Twenty-eight of the hospitalized patients required open surgery to remove the stones.

TABLE III

Group	Management	Number	Length of Stay (Days)
1	Home with stone	10	1.9
2	Passed stone in hospital	12	1.7
3	Cysto and manipulation	42	3.6
4	Unsuccessful manipulation	8	5.0
5	Unsuccessful manipulation with ureterolithotomy	4	8.5
6	Ureterolithotomy	24	8.4

ANALYSIS	NUMBER
Calcium oxalate	28
Calcium phosphate	8
Calcium apatite	3
Calcium magnesium, ammonium, phosphate	4
Calcium oxalate and phosphate	1
Uric acid	1
Phosphate	1

Only 45 stones were analyzed and their composition is detailed in Table IV, calcium oxalate being the most common type. Some stones were not sent for analysis because the patient had had previous calculi analyzed. It was thought the stone composition would not change. In some cases, the stones were so minute they were not suitable for analysis. In five cases, the stones were seen in the bladder or fragmented during manipulation and were not recovered.

Stone size is a factor in determining whether surgery may be required. Seven of the spontaneously-passed stones were less than three millimeters in greatest diameter. Of the twenty patients undergoing ureterolithotomy, the stones measured four to twelve millimeters. Those successfully manipulated transurethrally varied from two to eight millimeters.

Richard N. Isaacson, MD, was graduated from the University of Michigan Medical School in 1975 and is taking his residency in urology at the University of Oklahoma Health Sciences Center.

A 1973 graduate of the University of Texas Medical Branch, Galveston, William L. Barnes, MD, is certified by the American Board of Urology. He is clinical associate of urology at the University of Oklahoma Health Sciences Center. He is a member of the American Urological Association and the South Central Section, American Urological Association.

Donald D. Albers, MD, was graduated from Northwestern University Medical School and is certified by the American Board of Urology. He is clinical professor of urology at the University of Oklahoma Health Sciences Center. Among Dr Alber's medical affiliations are the American Urological Association, the South Central Section of the American Urological Association, which he served as president, the American College of Surgeons and the American Academy of Pediatrics.

The operative mortality was zero, and the postoperative morbidity was minimal. Some patients developed postoperative fevers to 101 degrees, none over 102 degrees. All responded to conservative measures. Other problems arose, such as the case in which two stones were pushed up the ureter and allowed to remain there; in another case, one ureter had the mucosa everted and required replacement of a ureteral catheter; there was one episode of a stone basket lodging in the ureter, requiring an open procedure; and in one case a stone that was in the kidney dropped into the ureter after ureterolithotomy, requiring a second procedure for removal. There was only one case of postoperative ileus following an open procedure.

It can be seen from this experience that most ureteral stones are managed safely and with relatively little morbidity to the patient once the pain is relieved. Patients with recurring stones require metabolic studies.

A few generalizations regarding the management of ureteral stones seem warranted. A small calculus, less than five millimeters in diameter, might pass spontaneously. A calculus of any size that is not causing infection, pain or obstruction can be observed for an extended period of time. Distal ureteral stones can be manipulated with a high degree of success (78% in this series). Indications for surgical removal include infection, intractable pain, obstruction or the presence of a large calculus lodged high in the ureter and not changing in position.

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A Seminar on Antibiotics

EVERETT R. RHOADES, MD

Contrary to popular opinion, Sir Alexander Fleming did not introduce antibiotic therapy.

Indeed, a large number of investigators preceded Fleming by many years. This review emphasizes the revolution in medical thought that began with Koch and Pasteur and which paralleled the development of antimicrobial therapy.

INTRODUCTION

This series of reports is based upon a presentation by the author at the Annual Physicians Spring Retreat at Padre Island, sponsored by the Office of Continuing Education of the University of Oklahoma Health Sciences Center (under the direction of Dr Irwin Brown) March 19-23, 1979. It is designed to review, in a brief form, certain points about antimicrobial therapy for physicians who are not specialists in infectious diseases. It is not intended to be an extensive review of pharmacology or microbiology. Such reviews are widely available, are noted in the references, and may be consulted at leisure. It is thought that the busy practitioner needs *brief* pertinent information, hence the presentation in near outline form. A great deal of this presentation contains the

author's opinions about less-known or often overlooked aspects of antimicrobial therapy and is based upon several years' experience evaluating common mistakes made in the selection and use of antibiotics. The approach is from an antibiotic perspective not a syndrome- or body-region perspective. Finally, it is not designed to duplicate information about drug doses, methods of administration or other information contained in pocket guides or drug package inserts. It is designed to supplement information available from other sources and to enhance understanding of the nature of antibiotics and their clinical uses. The entire seminar consists of introductory and historical information followed by reports of individual antibiotics. Subsequent and concluding installments will appear in successive publications and the entire series should serve as a ready reference for the busy practitioner.

Seminar on Antibiotics 1 The Development of Antibiotics— An Annotated Chronology

INTRODUCTION

"Purge me with Hyssop and I shall be clean"
Psalms 51:7*

In the 1870's a great revolution in medicine occurred, heralded by the modest letter from

*Fleming's *Penicillium, P. notatum*, was first described by Westling in Sweden who found it on decaying leaves of the blue labiate hyssop. When apprised of this fact Fleming was reminded of this verse from Psalms, and in his enthusiasm considered the biblical reference to be the earliest recorded use of penicillin — a view which is hardly justified.

Hyssop was a plant used for purification rites by ancient Hebrews. In Europe it is a mint with very aromatic leaves, formerly used as a treatment for bruises.

Koch to his old professor, Cohn, in which he described the proof that a single specific microorganism caused anthrax. This discovery not only fundamentally reoriented the philosophic basis of medicine (which before this could only speculate about what caused disease), but accelerated the development of microbiology, the study of infectious diseases, immunology, genetics, public health, and chemotherapy. This impetus has not yet abated.

The following outline of the development of antibiotics is presented to illustrate the interesting history of this great innovation in medical thought. The references contain detailed information for those wishing to learn more about this interesting topic.

INITIAL ATTEMPTS AT DEMONSTRATION OF ANTIBIOTICS

It is not generally recognized that a number of demonstrations of antibiotic activity preceded Fleming's discovery by more than fifty years. In most of these efforts there was no persistent plan directed at the manufacture of therapeutic substances. Pasteur of course, with his unbelievable genius, saw that bacterial antagonism could have important implications for therapy. Microbial antagonism was actually demonstrated by Lister five years before Koch showed that a bacillus was the specific cause of anthrax.

1871—Joseph Lister attempts to discover germs floating in air, discovers a mold which he transfers to a flask, introduces a motile bacterium and observes inhibition of motility. It is interesting to think of Lister as the first "surgical microbiologist."

1876—Koch discovers anthrax bacillus as cause of disease: The birth of microbiology. Revolutionized all previous concepts of etiology and treatment of disease.

1877—Pasteur and Joubert, using alkalized urine as medium, inoculate three organisms, discover inhibition of growth. This was the first clear demonstration of bacterial antagonism. Pasteur postulated that the effect resulted from a specific substance secreted by an organism and wrote, "This observation offers the greatest hope from the standpoint of therapy." Thus, antimicrobial

antagonism was one of first phenomena observed during the new era of bacteriology.

1879—DeBary: "When two organisms or more are grown together, one will eventually overcome the others."

1889—Freudenreich shows that filtrates of *Bacillus pyocyaneus* kill certain bacteria, including *Vibrio cholerae*; discovers "pyocyanase," widely marketed for many years as an antibiotic. Is now considered a "bacteriocin."

1889—Vuillemin coins term "antibiosis" to describe general condition of antagonism; his concept applied to all living things, not just bacteria.

1891—Wehmer grows *Penicillium* on a lawn of citromycetes which kills the latter. "Death is apparently due to the secretion of specific substances." Essentially the same observation as made by Fleming 37 years later.

1891—Rosenthal shows that cultures of *Bacillus subtilis* kill pneumococci, typhoid and cholera bacilli (many years later bacitracin was recovered from a strain of *Bacillus*)

1896—Gassio obtains crystalline mycophenolic acid from *Penicillium*; the second "antibiotic."

1899—Duchesne writes MD thesis at age 21 years: "A Contribution to the Study of the Fight for Existence of Microbes — the Reciprocal Influence Between Fungi and Microbes." Shows that mice infected with typhoid bacillus are protected by injections of broth of *Penicillium glaucom*.

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INITIAL ATTEMPTS AT THERAPY

Very quickly, these crude observations of bacterial antagonism were extended to actual attempts at therapy. In the latter part of the 19th century several studies were made, often using bacterial cultures to treat certain diseases.

- 1885—Cantani treats tuberculosis by spraying the throat with a culture of *Bacterium termo*. "Un Tentativo di Bacterioterapia."
- 1887—Emmerich reports good results in treating anthrax in rabbits with streptococci.
- 1889—Bouchard shows that anthrax in rabbits responded to *Pseudomonas* injections. Metchnikoff uses lactobacillus to treat cholera. He also suggested that antagonism might be result of specific substances. Metchnikoff was a prolific, erratic genius. His use of peroral lactobacillus is still widely practiced.
- 1909—Schiotz (Denmark) treats diphtheria carriers by spraying throat with staphylococci.
- 1909—Bocchia uses pyocyanase as therapeutic agent.
- 1916—Missle popularizes use of *E. coli* to treat typhoid, and dysentery; Agent was marketed as "Multiflor."

PRELUDE TO THE TWENTIETH CENTURY

By the end of the nineteenth century there were four anti-infective substances in wide use for antiseptics and therapy. These were bichloride of mercury (Koch's hands were persistently blackened because of his routine washing with this compound), chlorine water, iodine, and carbolic acid (phenol). None of these were developed from ideas of microbial antagonism. However, by about the time of World War I, a number of ingenious attempts were made to utilize the principle of microbial antagonism in the treatment of certain specific infections. Indeed, three antibiotics had been prepared, one of which was used commercially. These were pyocyanase, mycophenolic acid, and penicillic acid.

In the early 1900's, the field was dominated by the prodigious efforts of Ehrlich and his associates to develop specific chemotherapy. Ehrlich utilized the findings of the specificity of antitoxins as a basis for his search for a specific

antibacterial "bullet" and did not specifically utilize the concepts of bacterial antagonism. Rather, his interest grew out of the chemistry of dyes (his uncle, Weigert, devised the staining of white blood cells which is still in use) and specific staining of tissues which was the subject of his earlier research.

- 1900-1910—Ehrlich searches for "magic bullet" as outgrowth of his earlier studies of the selective staining of tissues.
- 1902—Laveran and Mesnil find that arsenicals kill trypanosomes. Ehrlich and Shiga discover sodium naphthylamine disulphonic acid "trypan red," a specifically synthesized chemotherapeutic agent.
- 1908—Gelmo synthesizes sulphanilic acid.
- 1910—Ehrlich and Hata discover salvarsan and find that it kills spirochetes.
- 1910 ff—Ehrlich and co-workers launch massive search of 500 azodyes and 2500 colorless chemicals, come upon sulphanilamide.
- 1913—Vandemer shows that *Aspergillus fumigatus* attenuates *M. tuberculosis*.
- 1913—Alsberg and Black discover third antibiotic, *penicillic acid*, active against *E. coli*.
- 1929—Fleming presents his report to Medical Research Club Feb 13, 1929. No one asks a question! Publishes "On the Antibacterial Action of Cultures of a *Penicillium*, with Special Reference to their use in the Isolation of *B. influenzae*." *Br. Journ. Exper. Path.* 10:226-236, 1929. Calls the material "Penicillin."
- 1932—Fleming uses penicillin as topical antimicrobial. It is too difficult to purify.
- 1933—Domagk in Bayer dye works studies derivatives of para-amino benzoic acid. Discovers Prontosil (Nobel Prize) and begins period of sulfa drugs. Successfully treats infant with staphylococcal sepsis.
- 1939—Dubos discovers tyrothricin. A deliberate search among soil microorganisms for a substance which would dissolve the capsule of pneumococci. Toxicity limited its usefulness.
(Hitler invades Poland)
- 1940 ff—Florey, Chain, *et al* study Fleming's lysozyme — discover paper on penicillin, begin development of penicillin. Their great achievement was the purification of penicillin in amounts sufficient to study, and carefully controlled animal studies show efficacy in infections.

- 1941—First patient treated with penicillin: a bobby with staphylococcal and streptococcal sepsis. Improved dramatically only to relapse and die as supply of penicillin is exhausted.
- 1941—Keefer and Rammelkamp begin studies of penicillin therapy in US.
- 1944—Streptomycin. Waksman coins term "antibiotic."
- 1945—Bacitracin
- 1947—Chloramphenicol
- 1947—Polymyxin
- 1948—Cephalosporin
- 1948—Chlortetracycline
- 1949—Neomycin
- 1952—Erythromycin
- 1956—Vancomycin
- 1957—Kanamycin
- 1961—Methicillin

Perhaps it is as well to close this outline in the year 1960, less than 100 years from Koch's initial report. The story of antibiotic therapy is a record of brilliant researches beginning concomitantly with the development of microbiology. Many able investigators preceded Fleming, who remarked that the earlier reports played no part in the development of penicillin. Fleming in his 1929 report refers only to Emmerich and Loew and Bocchia. It is often forgotten that the development of microbiology forms the central basis for present day medical concepts. The idea of a specific cause for each disease, prevention of disease by immunizations, the concept of specific chemotherapy of

illness, and the field of genetics are some of the revolutionary developments which have flowed from that modest letter written by Koch to his old professor, Cohn, suggesting he had found the cause of anthrax. The most important scientific demonstration of the twentieth century — genetic engineering — is a direct outgrowth of microbiology. In future centuries, it may be that the development of microbiology, with its elucidation of antibiotics will be regarded as one of the critical forces of human history.

In the 1960's and 1970's the significant advances have included widespread use of newer aminoglycosides, cephalosporins, trimethoprim-sulfa.

EDITOR'S NOTE: Seminar on Antibiotics II; The Basis of the Antibacterial Actions of Antibiotics, will appear in the July, 1980 issue of The Journal.

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Gastric Bypass Surgery for Morbid Obesity: Bibliography and Citation Analysis

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With Surgeon's Commentary By
G. Rainey Williams, MD

Two selected bibliographies are presented on the controversial gastric bypass procedure for morbid obesity: Current articles retrieved from the MEDLINE data base and articles cited at least five times in the references of the current list.

Twelve years have passed since gastric bypass as a treatment for morbid obesity was first described by Mason and Ito (1967). The procedure remains highly controversial. Physicians considering referral of patients for this procedure and surgeons considering its performance should be quite familiar with the reported experience.

Most of the 31 articles in this bibliography were taken directly from the online retrieval system, MEDLINE. (The current data base

contains entries from January 1, 1977, through August 30, 1979.) The first article was selected because it is the most current review of the procedure. The second article is the most recent documentation by a state medical journal. With five exceptions, all articles appeared in the surgery literature. English language articles which reviewed series of cases are included, and the number of references in each article has been recorded. Several articles represent series from the same institution, and seven of the 22 current articles are from Iowa City.

The last nine articles appear in the literature from 1967 to 1975 and were chosen by comparing the reference lists of the first 22. All were cited at least five times by their peers. Edward E. Mason, MD, original reporter of the gastric bypass surgery for obesity (along with Chikashi Ito) appears as an author in six of the nine cited articles, as well as in 6 of the 22 MEDLINE entries. Again, article #1 is his most recent reporting and article #8 summarizes ten-years' experience including the follow-up of 625 patients; he replies to unusual cases in #4.

Finally, the cited articles were checked against DIALOG's online, *Science Citation Index (Files 34 and 94)*** to see how many times each article was cited from 1974 to pres-

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**Records for SCISEARCH are in two files (94 contains records from 1974-1977; and 34 contains current citations from 1978 to present), resulting in approximately 2,060,000 citations; files are updated monthly.

ent — not just in the surgery journals — but in the entire literature. Interestingly enough, Mason is the primary author of both the first and last articles. Likewise, the last article in this bibliography is the first report of the experimental results of gastric bypass as a possible treatment for either acid-peptic ulcer disease or obesity (#31). This article by Mason and Ito (1967) has been cited in the literature 12 times during the past eleven years. The three most heavily cited articles are #26 (JH Payne, 1973, cited 111 times); #30 (JH Payne, 1969, cited 157 times); and #28 (HW Scott, 1971, cited 76 times).

Although articles #26 and #30 are not specifically on the gastric bypass procedure, they are important to include because they are so highly cited. Twelve of the 31 documents (with an asterisk) include discussions.

A Gastric Bypass Registry is maintained in Iowa City, Iowa, for surgeons interested in reporting their follow-up of patients (#8).

Surgeon's Commentary: The medical management of morbid obesity is frequently disappointing. The first widely-performed surgical procedures aimed at treating morbid obesity were various types of jejunoileal bypass. Although these operations are still performed, the demonstrated morbidity and mortality is high and many surgeons have discontinued using this form of therapy. Gastric bypass and, more recently, gastric partitioning have been described as useful procedures with fewer serious complications than jejunoileal bypass. Unfortunately, morbidly obese patients often desperately seek surgical treatment and seem willing to accept almost any risk in doing so. Certainly, the surgeon willing to perform such procedures should select the safest operation available. This article should be helpful in making that decision.

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News From The Oklahoma State Department of Health

Environmental Epidemiology

A new environmental epidemiology section has been established with the Epidemiology Service of the State Health Department. Its function will be to evaluate public health problems resulting from toxic materials and to assist in designing solutions for these problems. The formation of this section, combined with the Oklahoma Legislature's recent appropriation for an increased toxics program, will form the foundation of a more effective toxics management program in the state.

The formation of this section will strengthen the coordination between the environmental services and the medical toxic surveillance activities of the health department. This effort will allow the department to perform analysis of the impact of various environmental contaminants even more effectively and rapidly than before.

Passage of federal legislation such as the Clean Air Act, Safe Drinking Water Act, Clean

Water Act, and other environmentally oriented laws has resulted in the need for an even closer examination of the chemical toxic effects in public health. Such legislation, combined with many pressing state and local environmental issues involving toxics, have focused even greater public attention on the epidemiological implications of use of these chemical compounds and their proper disposal. Recently in Oklahoma questions have arisen concerning polychlorinated biphenyls (PCBs), nitrates in water supplies, lead poisoning, and the carcinogenic properties of certain environmental contaminants. All these issues point out the need for an intra-departmental, coordinated approach.

An important facet of this increased responsibility within the Epidemiology Service does not involve additional program direction or any new enforcement authority. Such direction and authority will remain the purview of the various program units already charged with such responsibility. The Environmental Epidemiology Section is designed specifically as a support entity to provide technical expertise and intra-departmental coordination to give the OSDH an increased effectiveness in dealing with these complicated environmental problems. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MARCH, 1980

DISEASE	MARCH 1980	MARCH 1979	FEBRUARY 1980	Total To Date	
				1980	1979
Amebiasis	4	2	5	9	5
Aseptic Meningitis	3	2	3	9	4
Brucellosis	2	—	—	2	—
Encephalitis, Infectious	2	1	—	2	2
Gonorrhea (Use Form ODH-228)	996	962	941	3299	3056
Hepatitis A	52	39	35	103	57
Hepatitis B	17	10	15	46	18
Hepatitis Unspecified	28	14	21	60	27
Measles (Rubeola)	149	2	8	158	3
Meningococcal Infections	5	10	3	9	16
Pertussis	5	2	1	8	2
Rabies (animal)	34	33	13	61	61
Rocky Mountain Spotted Fever	1	—	—	1	—
Rubella	1	12	—	1	16
Rubella (congenital)	—	—	—	—	—
Salmonellosis	9	17	12	33	43
Shigellosis	19	23	16	45	49
Syphilis (Use Form ODH-228)	5	14	8	20	24
Tetanus	—	—	—	—	—
Tuberculosis	21	33	26	70	104
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—

Speaking Out—Voices of Disabled People

KAY THOMAS

Editor's Note: The Oklahoma State Medical Association is a supporter of the Governor's Committee on the Employment of the Handicapped and a sponsor of the yearly "Ability Counts" contest. The following is this year's winning paper by Fairview High School student, Kay Thomas. The OSMA contributes \$300 each year to help sponsor transportation for the winning student and his or her teacher to the national awards in Washington, DC.

Paula Harod's fingers dance on the keys, filling the dark concert hall with a lively, stimulating ragtime tune. The audience listens breathlessly and now explodes with applause. Paula stands to take her bow. Her hands automatically fold behind her back so that no one will notice these hands differ from those of other high school pianists in the contest. This talented young lady was born with third and fourth fingers that extend only to the first joint on each hand.

Cynthia Hamilton, a medical doctor's receptionist, calms patients' nerves as she greets them with a warm, friendly smile. Her beauti-

ful personality glows through that constant, reassuring smile. Many never realize this efficient, happy employee works from a wheelchair.

Paula and Cynthia have much in common. Both are tremendously strong individuals who have conquered a handicap to the extent of competing on equal terms with able-bodied persons. Many impaired Americans are experiencing victory as they develop an optimistic outlook on life, overcome society's dissenting attitude toward the handicapped, and cause others to understand the significance of the disabled as human beings.

A disabled person's attitude toward himself can be either his mightiest asset or his mightiest liability. A handicapped manager of Pioneer Telephone Company and high school football and basketball official states, "Every individual contains a self-concept and repeatedly proves its truth. For instance, one who believes he is a success will succeed; one who believes he is a failure will fail." A handicapped person can easily pity himself and harp on his weaknesses. However, the same person can overcome these weaknesses by meditating on his strengths. A positive attitude enables the handicapped to achieve. High goals can be set and reached through determination and self-confidence, in



Geraldine Burns, Fairview High School teacher, is shown receiving \$300 check from Mark D. Holcomb, MD, Enid.

spite of a disability. Like any other person, the one physically or mentally impaired must accept himself as he is.

Those with limited abilities also need encouragement and motivation. Yet the American public encumbers our disabled brothers through our own partial blindness to their needs. Former chairman of the Wichita Easter Seals committee stresses, "Handicapped people are not actually handicapped, but simply able-bodied people with disabilities; society is guilty of causing handicaps through barriers." Due to poor architectural structure, numerous public buildings are inaccessible to multitudes of citizens. Mobility is a difficulty; hence, independence is a difficulty, all because of careless and indifferent planning.

Attitudinal barriers are often more damaging than architectural barriers. Psychologically and unconsciously, we who are whole consider restricted persons as nonhuman. It is difficult to overlook the wheelchair or deformed limb and fully view the inner person. Perhaps this is especially true in employment. The general opinion of employers seems to be that hiring the handicapped is good business — as long as it is someone else's business. But those who have dared to hire the handicapped have found that it is indeed excellent business. Disabled employees have a lower accident rate and a higher attendance average than that of other employees. Could it be that since the handicapped have to work harder to acquire a job, they also work harder to retain it? An em-

ployer who concentrates on the myriad of abilities of the handicapped finds that their abilities easily outweigh the disabilities, making these workers definite assets to a business.

The handicapped voice intensely desires for equal opportunities in every phase of life. They are competitive in employment and need the opportunity to prove their capabilities. They are immensely beneficial to their communities when given the chance to be involved in service organizations. They are also highly contentious in countless aspects of recreation.

An even greater drive is the desire to be accepted. We must realize that crippled bodies house brilliant minds and warm personalities. Most handicapped persons readily speak of their disabilities as "only an inconvenience." The real battle is to make others see that impaired people have characteristics and qualities commensurate to those of complete humans. We who are unfamiliar with the handicapped often fail to recognize their capacities to love, to share ideas, to lose their temper, and to laugh.

We must cease hindering the disabled from developing into the genuine individuals our country desperately needs. Handicapped people can become some of our strongest and most influential citizens when given a fair chance and a bit of encouragement.

Paula continues humbly to accept recognition and praise as she hides her hands from audiences and judges so that her deformity will not become an advantage to her in competition. Cynthia continues to work diligently and cheerfully, inevitably causing others to forget she is crippled.

The voices of Paula and Cynthia speak loudly and distinctly, as do the voices of thousands of incapacitated Americans. Obviously, they want no pity; they certainly do not indulge in self-pity. They do not wish for others to consider them as handicapped, but as capable, responsible people. We who are blessed with whole bodies have two choices: We can either follow the fine example so evident in the lives of those less fortunate, or we can continue to avoid the issue altogether. To Paula and Cynthia life is bright, exciting, and always full of attainable new heights. What could we as able-bodied citizens accomplish if we were to assimilate the positive attitudes of these dynamic individuals?

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Population Control in the People's Republic of China

GEORGE W. PROTHRO, MD, MPH

A unique system of incentives in the form of rewards and penalties encouraging compliance with family size objectives recently initiated in The People's Republic of China is designed to attain national goals for population control.

September 21, 1979, marked the thirtieth anniversary of the proclamation of the People's Republic of China by Chairman Mao Tse-tung. Perhaps no nation in history has made as much progress in providing work, basic food, clothing and medical care for so many people in such a relatively short time. The revolutionary leaders of this country of nearly one billion people comprising one-fourth of the world's population early recognized that population control was essential to the improvement of the economic conditions of the country and the living standards of the people.

With this concept in mind, there has been an emphasis on family planning and population control throughout the thirty-year history of the People's Republic of China and there has already been a slowing of the rate of population increase.

The thirtieth anniversary year was marked in September of 1979, by the adoption of well-defined national population goals and individual family-size objectives. These objectives are designed to assure a peak in rate of population increase no later than 1990 and a steady decline in national population after the year 2000. An ingenious system of individual family incentives in the form of rewards for conformity and penalties for exceeding the individual family-size objectives have been inaugurated. These seem sufficient to assure success of the program.

FAMILY PLANNING IN CHINA— THE FIRST THIRTY YEARS

Prior to the recent adoption of the new national program, information on contraception and family planning had been spread throughout all areas of China through educational and propaganda programs by a variety of resource persons at all levels of government and community life. These have included women assigned to inform their co-workers in the production brigades of each commune. Contraceptive information and supplies are also distributed by public health stations at local and provincial (state) levels. Midwives are utilized in the effort as are the 1,600,000 "barefoot doctors" serving rural and medically underserved areas of the country. Also utilized are the one million fully-

qualified physicians and another million allied health professionals including nurses, pharmacists, and technicians.

The preferred contraceptive methods have been the pill and the intra-uterine device (IUD). Even the barefoot doctors are trained in the insertion of the IUD and periodic examination and cancer testing of women who take contraceptives.

Contraceptive supplies are also available free through a wide variety of other sources. These include certain shops such as barber shops, the large outpatient clinics operated by all hospitals, and the equivalent of our pharmacies and drugstores.

In view of the concern often expressed in the United States that the ready availability of contraceptives has been a factor in the dramatic increase of venereal disease, it is interesting to note that China is the only major nation in which venereal disease has been essentially eliminated and at the same time, contraceptives have been freely available. The physician director of a 340-bed hospital in Kweilin with an outpatient clinic caring for 1,200 to 1,400 patients a day noted that he had never seen a case of venereal disease. He attributed the elimination of venereal disease partly to the fact that medical care was made available to all areas of the country, but stressed that a more important factor was the new social values, self esteem, self responsibility and the social system of the revolutionary regime. Our brief observations would tend to support his statement.

Postponing the age of marriage has been encouraged by the government and although

there have apparently been no penalties assessed for failure to abide with the governmental policy, nevertheless, there seems to be little question that the recommended minimum age guidelines for marriage have been followed. The recommended marriage age for rural areas is 25 years for males and 23 years for females. In urban areas, it is 26 for males and 24 for females. Among the crowds of young people seen in the streets in China, there is very little mixing of the sexes within the groups and there are no open signs of affection shown between males and females in public. In contrast, the love and pride so obviously shown by parents for their children throughout China was indeed an impressive witness to existing close family ties.

THE NEW FAMILY PLANNING INCENTIVES IN CHINA

In September of 1979, a new national policy designed to strengthen the program for population control in China was adopted. Because of the relative newness of the policy, all the details were not completely known in the five medical centers visited by our group of physicians in October. There were some minor contradictions in detail, however, there is no question about the basic concept of the program. It is designed to implement the following individual family objectives:

1. One child per family is recommended.
2. No penalties for two children per family, but there should be a four-year period between the first and second pregnancy.
3. Those families complying with the above are recipients of meaningful monetary, work, and housing rewards for themselves and their children. Those having three or more children are correspondingly penalized.

The new policy will not apply retroactively to families whose size exceeded these recommendations at the time of enactment of the new policy. Other exceptions include certain designated sparsely-settled areas of China and certain minority groups which might be in danger of extinction under the new policy.

One will immediately note the contrast in this system with many of the social welfare programs in the United States in which family payments are increased proportionately to the number of children and the larger families receive priority consideration for public housing and other benefits.

George W. Prothro, MD, was graduated from Washington University School of Medicine in 1945. Earlier he had received his MPH degree from the University of North Carolina School of Public Health. Doctor Prothro is associate professor and director of the Division of Public Health, Environmental and Community Medicine at the University of Oklahoma Tulsa Medical College. Among his medical affiliations are the American Academy of Family Physicians, the Association of Public Health Physicians, the American Occupational Medicine Association and the Oklahoma Public Health Association.

Specifically, the benefits accruing to the Chinese family having only one or two children will include:

1. Priority for housing assignment.
2. Preferential work assignments and promotion.
3. Payment of educational expenses of children.
4. Preference for assignment of a private land plot in rural areas.
5. Children will have preference for university admission.
6. Parents with one child are given approximately 10% additional pay per month until the child reaches age 14, and at retirement they will draw 5% additional benefits.
7. With the first two pregnancies, 56 days of paid maternity leave are provided.

Families are "visited" after a second child and encouraged to undergo sterilization of the male or female. Sterilizations are free on request at any time. Should the woman become pregnant a third time, they are encouraged to have an abortion. If the family refuses the abortion and has a third child, all

above benefits are withdrawn and in addition:

1. There is no paid maternity leave.
2. 10% of both parents' income is withheld and distributed among those families in the work group with only one or two children.
3. The family name is brought up in public meeting and publicized.
4. As indicated, they lose priority for job assignments and promotions, housing, land assignments, and are responsible for certain of their children's educational and medical expenses.

A fourth pregnancy is the occasion for a visit to the family by government "advisors." The expense of this visit is paid by the family. No details were given as to the nature of this advisory visit; however, our China guide summarized the government's new program of population control by noting that, "In China today, one child is recommended, two is OK, three is impossible."

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OSMA Entertains Prominent Speakers — Overturns CME Requirements

"We are living in the golden age of medicine." That's the message that American Medical Association President Hoyt Gardner, MD, brought to Oklahoma physicians at the 74th Annual Meeting of the Oklahoma State Medical Association which was held in May.

Gardner told the opening session of the OSMA House of Delegates that the AMA is a major force and a significant leader in medicine in this country. He told Oklahoma doctors that the AMA publishes more medical publications than any other group in the world. Likewise, he said, AMA's library service is recognized worldwide, and its capacity for computer services is second only to that of the Department of Health and Human Services (formerly the Department of Health, Education and Welfare).

Gardner said physicians throughout the country can look to the AMA for guidance because, "The AMA believes as doctors believe." He said that medicine is among the four original professions to which people have always looked for guidance . . . the others being law, religion and education.

University of Oklahoma President William S. Banowsky, PhD, told approximately 100 persons at the first OSMA President's Prayer Breakfast that, "Faith is the assurance of things hoped for, and the conviction of things not seen."

Dr Banowsky brought a spiritual message, saying that too many people seek materialism in order to fulfill an emptiness within their life. He said boredom with life is often the end result because materialism and other such things are temporal and will soon pass away. Faith and hope, he said, are eternal.

Robert DuPont, MD, a practicing psychiatrist and president of the Institute for Behavior and Health, Inc., spoke to a sold-out crowd at the auxiliary luncheon.

Dr DuPont said the 20th century has been characterized by consistent improvements in

the health of all ages of our population with the exception of the last two decades. He focused upon health problems of adolescents and said accidents, suicides and homicides involving people 15 to 24 years of age have caused the death rate of youths to climb above that of any other age groups. He also said the lifestyle of this group is a major reason for their declining health.

According to DuPont, today's adolescents have grown up watching television and have experimented more than others with marijuana and other drugs. He says although some studies claim marijuana is not harmful, it does cause a variety of problems and helps determine the lifestyle of a person.

As a result, he said, lifestyles advocating "You do your thing and I'll do mine" have developed which must be turned around to "What you do influences me and what I do influences you because we care."

DuPont recommended that physicians become leaders in helping influence youth toward healthier lifestyles by showing concern and by offering appropriate advice.

The featured program Saturday morning was a seminar focusing on the physician's family led by Perry Berman, MD, a practicing psychiatrist from Philadelphia. Dr Berman, who is an expert in two career marriages, discussed problems particular to physician-marriages and then conducted a number of



A possible 21 Category 1 CME credits were offered at the 1980 OSMA Annual Meeting. Included in the scientific offerings was an Advanced Cardiac Life Support Course.

break-out sessions along with Oklahoma City psychiatrists. This session as well as other scientific programs was extremely well attended.

In the business part of the meeting delegates reviewed 16 resolutions and reports from each of the OSMA councils and committees. Receiving the most attention, at least from the lay press, was a resolution submitted by the Central Oklahoma Pediatric Society and the Oklahoma City Obstetrical and Gynecological Society. This resolution pointed out that unwanted pregnancies among teenage girls has emerged into a leading health problem for this age group today and that live births to girls less than 15 years of age is increasing in this state at a rate five times that of the national average. It also pointed out that Oklahoma taxpayers pay as much as \$68 million a year to support teenage mothers and their babies. The resolution, which was approved by the house after receiving a favorable recommendation from its reference committee calls upon the OSMA to "support the development of health and family life curricula in public schools of Oklahoma, which will emphasize the importance of conception of life within the framework of a stable family unit and the profound responsibilities of parenthood." The resolution also calls upon the OSMA to seek legislation which will "face the physicians of Oklahoma to provide methods of prevention of pregnancy to teenagers at risk in accordance with their best medical judgment."

A resolution submitted by the Cookson Hills Medical Society calling upon the House of Delegates to poll the members of the association to determine whether or not there was support for unified membership with the AMA was turned down.

Another resolution receiving a great deal of attention was a resolution submitted by the OSMA Council on Planning and Development which urged that the continuing medical education requirement for membership in the Oklahoma State Medical Association be suspended. It was the reference committee's recommendation that this resolution be approved, and the House of Delegates voted overwhelmingly to support the reference committee recommendation. This means that the CME requirement which was enacted two years ago is now suspended and no longer applies. The resolution did, however, encourage all OSMA members to continue their medical education efforts by accumulating at least 150 CME credits each three years.



Auxiliary President Shirley Forsythe and OSMA President William M. Leebron, MD.

In other actions the OSMA House of Delegates:

- Suspended the activities of the OSMA Peer Review Committee. The functions of this committee, which include resolving fee disputes and determining the quality and appropriateness of medical care, have come under fire from the Federal Trade Commission. The FTC has ruled that these committees illegally set fees and therefore the OSMA's Peer Review Committee was suspended until the entire issue can be studied.

- Voted to seek reinstatement of the AMA Committee on Medical Aspects of Sports.

- Turned down a resolution seeking OSMA's endorsement of a statewide emergency communications system.

- Approved an amended resolution which encourages all physicians to become competent in cardiopulmonary resuscitation but at the same time discourages Oklahoma doctors from taking part in any formal training session *imposed* on physicians other than those required by the Medical Practice Act of the State of Oklahoma, hospital medical staffs and by specialty training boards. The resolution opposed a Joint Commission on Accreditation of Hospitals (JCAH) ruling that all physician staff members of accredited hospitals must be certified in CPR.



AMA President Hoyt Gardner, MD, told reporters that doctors want to be partners with government in providing quality medical care. He also warned, however, that when government plays too large a role such as in England the quality of the care decreases.

- Approved a report of the Task Force on Mobile Drug Abusers and an amended resolution calling upon pharmacists to closely monitor prescriptions for potentially dangerous drugs. The resolution was amended to call upon the OSMA president to appoint an Ad Hoc Committee for liaison with the Oklahoma Pharmaceutical Association. The House of Delegates also asked that the OSMA president encourage the president of the Oklahoma Pharmaceutical Association to appoint members to this special liaison committee.

- Turned down a resolution which sought the OSMA's support for the establishment of a residential facility to provide education and training for retarded adults. The House of Delegates indicated support for the concept but felt that it should not go on record by supporting any one such institution.

- Established 1981 dues at \$180 per year. This is the same as in 1980.

- Turned down a resolution requesting a mechanism be established to allow quarterly payment of OSMA dues and quarterly payment of insurance premiums to the Physicians Liability Insurance Company.

For additional information about the 1980 OSMA Annual Meeting see next month's *Journal* which will include the proceedings. □

AMA Releases New Edition On Physician Distribution

How many physicians per person practice medicine in this country? What are the policies of state boards of medical examiners for licensure? What is the distribution of physicians in specialties? Where can information on hospitals, population and income be obtained?

All of these questions and many more are answered in the American Medical Association's latest edition of *Physician Distribution and Medical Licensure in the US 1978*. The book is divided into two sections. One part records data on medical licensure in the US and the other section includes statistical information describing location, specialty and professional activity.

The new volume indicates that one physician is available for every 535 persons in the United States. The actual number of doctors is 375,811 and 91.2 percent of them are involved in direct patient care. The volume says the ratio of non-federally employed physicians is 187 per 100,000 persons which is nearly 23 percent more than the 1971 figure. Washington, DC ranks first in physician population among cities with 524 physicians per 100,000 population and South Dakota has the lowest number with 106 doctors per 100,000 people.

The book also indicates the ratios of physicians distributed within various sections of the country. The New England states have the highest ratio with 238 physicians per 100,000 people and the south central section including Alabama, Kentucky, Tennessee and Mississippi has the lowest number of physicians.

AMA's new physician distribution publication says that the physician manpower distribution includes 54,893 doctors who are engaged in general and family practice; 96,940 are in medical specialties; 98,567 practice in surgical specialties and 92,314 are active in other specialties.

The number of women physicians is growing. The new physician distribution book says that 45,540 have established practices and this figure is 6,688 more than the number of women who had practices in 1976. Nearly 12,000 are engaged in medical specialties while more than 12,000 are involved in other specialties.

The volume points out that 20,242 physicians are employed by the federal government with the greatest concentration of these

doctors being in the southern region especially in the South Atlantic Census Division. The federal physician population involves 12.6 percent in administrative positions and 9.4 percent are involved in research.

The publication costs \$15 each with a purchase of less than ten copies, \$14.50 for 11-49 copies and \$14 for 50 or more. Foreign orders are \$21. To order write OP-071, AMA Order Department, PO Box 821, Monroe, Wisconsin 53566. □

Self-Help Remedies Could Be Hazardous

Health food stores have become popular but many people patronizing them have been substituting herbal remedies for conventional medical services resulting in serious injury and even death.

In a recent issue of the *Journal of the American Medical Association* two physicians at the Center for Disease Control, Atlanta, reported an incident illustrating the potential hazard of using some herbal remedies. Three

young women were reported to have used pennyroyal oil obtained in a health food store to induce abortion. One woman died and another became seriously ill.

"The women's reasons for turning to herbal substances to terminate unwanted pregnancies seem to be a part of a subtle movement away from conventional medical services. Among some US subcultures, reliance on herbal remedies is apparently increasing," one doctor said.

Although "self-help" medicine is a new trend, the doctors said the higher costs of conventional medicine have also encouraged the movement.

The physicians said the Food and Drug Administration (FDA) regulates conventional medicines to insure that they are safe and effective, but that FDA has little control over herbal medicines and health food stores. However, they said that government control is not the answer to this problem. The Atlanta physicians suggest that an emphasis toward continued public education be placed on the most popular forms of self-treatment.

"We assume that, on the whole, informed consumers will make health choices in their own best interest," one of the doctors said. □

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AMA Statement On National Health Insurance

The following statement concerns the position of the American Medical Association on national health insurance. Lowell H. Steen, MD, chairman of the AMA Board of Trustees, and Hoyt D. Gardner, MD, AMA president, presented the statement to the Health Committee on Ways and Means of the United States House of Representatives. The AMA spokesmen delivered the presentation in February.

Mr Chairman and Members of the Committee:

My name is Lowell H. Steen, MD, I am a physician practicing medicine in Hammond, Indiana and I am Chairman of the Board of Trustees of the American Medical Association. Participating in our presentation is Hoyt D. Gardner, MD, president of the AMA, a physician in practice in Louisville, Kentucky. With us today is Harry N. Peterson, director of AMA's Division of Legislative Activities. We are pleased again to present the views of the American Medical Association on the subject of national health insurance.

We have appeared many times before the Committees of the Congress on this and other subjects to advocate improvements in public health and our health delivery system. Our support has covered a variety of subjects, including basic medical research, medical education, nurse training, food and drug safety, environmental protection, maternal and child health care, and personal health education, just to mention a few.

Particularly germane to the subject before the Committee is our support for the increased availability of private insurance coverage for our citizens and access to mainstream medical care. Basic to meeting these goals is a recognition of the necessity of maintaining voluntary, free-choice method of medical and health care delivery. We have offered our own program to the Congress as well as our suggested changes in other programs.

Mr Chairman, the debate concerning national health insurance is now in its fourth decade. Originally proposed during the early Truman Administration, NHI was then seen as a program to assure that all Americans had access to necessary medical care services. Increased access to medical care was viewed as the proper means of improving the nation's health status.

These past 30 years have seen a revolution and phenomenal improvement in medical care and in the circumstances affecting the delivery of this care. During this period, there has been an explosion in the medical sciences that has given new life and hope to many. These improvements, including those in neonatal care, treatment of heart disease and other conditions, have led the Surgeon General of the United States to recently state that the American people have never been healthier.

Likewise, there has been a revolution in access to health care in this country with major increases in the number of health care facilities and manpower. A vast majority of our population now is covered by private health insurance through employment. In addition, the aged, disabled and disadvantaged now have coverage through Medicare, Medicaid and private supplemental health insurance policies. While there are varied estimates of the number of people covered, one estimate of the number of Americans without some form of care coverage is less than seven percent.

Against this backdrop of significant improvement in our health care delivery system there has been a substantial change in the rhetoric from the supporters of national health insurance. We hear less about the necessity of improving health care. What we are hearing, through certain of the major proposals, is a call for fundamental restructuring of the health care system through a program of national health insurance. This call for restructuring is not based on the failure of the health care system to provide and improve services. Motivation for the restructuring now appears to be based on economic considerations. It is indeed ironic that the very successes of the health care system are being characterized as problems and becoming targets to justify national health insurance. The restructuring calls for fixed budgets, negotiated fees and decreased capacity. While the earlier calls were, in effect, for greater access and greater care, the emphasis has now turned to fiscal restraints to impose limitations on the system. Some proponents assume that America's commitment to the health of her people has reached its limit.

The AMA, however, takes strong exception to conclusions in the NHI debate that would circumscribe further delivery improvements. To emphasize this point, we are unconvinced by the arguments that too many resources are now going to health care. Some would have us

believe that medical care is taking too large a percentage of the gross national product. However, ask any individual what is more important to him than his health and he will not have an answer. Tying health care costs to a fixed percentage of gross national product will, as stated by Secretary Harris, lead to the inevitable rationing of health services. Tying health care costs to congressional appropriations will also ultimately politicize the delivery of health care in this country.

Examples of such centrally planned health care systems abound. For example, the British system is plagued with shortages and administrative and distribution problems.

We have said many times the American system is not perfect. Through a pluralistic delivery system it has provided unprecedented advances in health status. It has done so without the administrative problems that central planning entails. A centrally planned and operated national system for health care must, for cost and budget purposes, ration care. It must make decisions, like the British have done — that access to certain services will be limited. Such a system, in reality, disadvantages those who are most vulnerable in our society, the poor and the aged. Those who have the wherewithal will purchase the medical services they want even if they must go to foreign countries. It is those who have nowhere else to turn, no services other than the governmentally controlled system, who will have to do without necessary care.

While the past 15 years have seen a significant increase in the percentage of the gross national product attributed to health care, we are hard pressed to understand how this fact has taken on a negative connotation. High quality medical care has increasingly become available to a larger portion of our population. The services provided have also been improved and intensified — with a greater ability to prolong and improve the quality of life. In our view a debate over percentage of the gross national product (GNP) is not relevant in human terms. What is important is that resources devoted to health care are equal to the needs of our people.

The AMA is dedicated to improving the art and science of medicine. Inherent in that mission is change and we have always favored change that would improve health care.

Changes in the health care delivery system should be designed to build upon the strengths of the existing system. Such improvements would include: Minimum standards of adequate benefits in all health insurance policies sold in the US, with appropriate deductible and coinsurance; a simple system of uniform benefits provided by federal, state and local governments for those unable to provide for their own medical care, including uniform benefits for the poor through the purchase of private health insurance where possible and improvements in medical coverage through the purchase of private and catastrophic coverage; and a nationwide program by the private insurance industry (and government if necessary for reinsurance) to make available catastrophic insurance coverage for those illnesses where the impact of such illness would be economically devastating. All catastrophic coverage should allow for appropriate deductibles and coinsurance to make it economically feasible and to avoid abuse. We would also support a program whereby employers (eg, with ten or more employees) would be required to offer catastrophic insurance as an option for all employees, with employees sharing a portion of the premium cost. Comparable incentives should also be made available to the self-employed. Provisions should also be made for coverage of the unemployed for a limited period of time following termination of employment with national availability of private insurance. Where possible, these modifications should be implemented at state level.

These changes to the private health insurance system would go a long way to closing the gaps that now exist in health insurance coverage and would serve the nation far better than the proposals that would disrupt the health care system through a radical restructuring of the way health care is delivered.

Mr Chairman, Dr Gardner will now comment on several of the bills before the subcommittee.

Statement of Hoyt D. Gardner, MD

COMPREHENSIVE PROGRAMS

HR 5191 — The Health Care for All Americans Act

This bill, introduced by Representative Waxman, would establish a program that

would be federally administered and controlled and provide for compulsory insurance and a mandated package of comprehensive health insurance benefits. Annual budgets fixed at the national and state levels would limit expenditures for health services. Increases in the national budget in any year would be limited to a three-year average rate of increase in GNP. Insurance premiums, hospital budgets and physicians' fees would be established within the budgetary constraints.

Insurance for most of the population would be provided through federally certified and regulated private insurance companies, Blue Cross/Blue Shield plans and Health Maintenance Organizations (HMOs). Medicare would be retained for the elderly and those who are under 65 and disabled.

Each of the certified insurers would be a member of a national consortium of companies, plans or HMOs and would be represented by its consortium in premium rate determinations.

A newly created national health board would establish national policy guidelines to implement the program, fix annual NHI budgets, certify the insurers and the consortium, and negotiate premiums. State health boards would carry out the national board policies, negotiate hospital budgets and physician fee schedules.

Employed persons and their families would be covered by private insurance policies, service plans, or HMOs provided through their employers. Employer coverage for employees would be mandatory and the employer would be required to pay at least 65% of the premium. Non-employed and self-employed persons would be required to enroll in a plan. For those who are recipients of supplemental security income or aid to families of dependent children, the federal government or the state government would pay the premium.

Benefits would provide unlimited hospital and physicians services subject to limits on psychiatric care, home health services and skilled nursing services. Medicare would be upgraded to ensure uniformity of coverage for Medicare beneficiaries.

Physicians would be reimbursed on the basis of a fee schedule. For services that could be provided at the same level of quality by two or more categories of personnel (eg, a non-physician and physician), the established fee would be set at a reasonable level for the lesser cost personnel. Physicians would be required to

accept the established fees as payment in full for services performed.

The program would be financed through a combination of payroll taxes, earnings based premiums, state and federal payments, Medicare taxes and general revenues. An employer who had a substantial increase in premiums as a result of the program would be eligible for a tax credit. There would be a premium for the program for all those with non-wage income in excess of \$2,000 per individual or \$4,000 per couple.

Mr Chairman, this proposal would cause irreparable harm to the present health care delivery system. The program would through its national and state health boards, completely control all health care in the nation.

The proponents of such governmental control of the health care system cannot justify these changes based on an improved delivery system and improved health status of our citizens. To the contrary, as a result of these radical changes, a well established, highly successful health care delivery system would be effectively decimated. This proposal would spell an end to the existing health care system — a system that, with continued improvements, would meet the desired needs.

We agree with Secretary Harris who stated at a joint hearing held in November of last year before the health subcommittees of the Interstate and Foreign Commerce and Ways and Means Committees that "within the context of the US health care system, a closed end budget would inevitably result in an arbitrary rationing of health care services." We have always said that such rationing would not be in the best interests of the American people.

In advocating this program its proponents have said it would build upon the present system. However, even a superficial review of the program establishes the fact that the private sector would in reality no longer exist. Insurance carriers would be mere surrogates to the federal government. Practitioners would have the terms of their profession established by national fiat. There would be little incentive for achievement and excellence, a problem endemic to governmental programs. Finally, the so-called "premiums" under the program are in effect new taxes, taking basic underwriting out of the health insurance area and taking a still greater share of the GNP away from the private sector and into government

expenditures, thus increasing the pressure on accelerated government spending.

This program should not be adopted. It would nationalize the health care system and disrupt the delivery of health care nationwide, without any improvement in the nation's health status. It would be a risky experiment, the price of failure being the loss of the health care system that now provides high quality care. Like Secretary Harris, we see in this program a potential \$200 billion a year pork barrel, the distribution of which would determine how and under what circumstances Americans receive their health care.

HR 5400 — The National Health Plan

This is Phase I of the Administration's plan for universal and comprehensive coverage. It provides for a mandate on employers to provide catastrophic health insurance for employees and for the upgrading of benefits for Medicare/Medicaid populations.

A federal HealthCare program would administer Medicare and Medicaid as a single entity. Expanded benefits, including unlimited hospital medical services, would be uniformly provided for the aged and low-income population. Present deductibles and coinsurance in Medicare would continue but such cost sharing would be limited to \$1,250 per person per year. Eligibility, based on the level of income, would be liberalized so as to add large numbers to the Medicaid rolls, and benefits for such low-income groups would be fully subsidized. Persons not qualified for HealthCare or employment-based insurance could purchase catastrophic coverage from HealthCare, and out-of-pocket expenses under such coverage would be limited to \$2,500 per year.

An employer guarantee program would mandate on employers the provision of catastrophic insurance for employees, with the payment of at least 75% of the premium by employers. Such coverage could be furnished through a private insurance policy or benefit plan or by buying into the public HealthCare plan. Benefits would trigger after \$2,500 of medical expense.

The Carter proposal contemplates cost containment legislation to fix a percentage limit on the increase in hospital revenues and

expenditures. Also included would be a fixed limit on capital expenditures for hospitals nationwide. This House has clearly rejected the revenue controls sought last year by the administration to be imposed on hospitals.

Services furnished under HealthCare would be billed directly to the program, not the beneficiary, and the HealthCare fee schedule would set physician charges. The fee schedule is intended to be advisory only with respect to services provided under the mandated coverage.

While not as sweeping a change in the health care delivery system as the Health Care for All Americans Act, this proposal is only the first phase of a program that would ultimately bring health care in this country under the complete domination of the federal government.

While paying lip service to improvements in the availability and access to care in this country, the administration's proposal appears to have a central, overriding direction — cost control. The first phase of the President's program establishes the basis for future additional controls and nationalization. This future expansion of the program was specifically forecasted by Secretary Harris in her recent testimony.

While the administration has often stated that the solution to our major problems should be found in the private sector, in this case the administration is proposing a new massive federal health care program. Instead of upgrading coverage for the poor, aged and disabled through the purchase of health insurance policies in the private sector, the administration is proposing a federalized HealthCare program designed to replace the Medicare and Medicaid programs. Problems in administering Medicare and Medicaid are well known. One of the great problems that all those dealing with Medicare and Medicaid encounter is the continuing promulgation of complicated regulations with difficulties in establishing a working relationship with the government agencies. No one is satisfied with the present state of affairs, yet the administration proposes to expand an already controversial and overworked system. We would advise the Congress not to repeat the errors of the '60s and not to place greater faith in the executive branch to deliver service than is deserved. Instead, we suggest that government turn to the private sector by purchasing such health

services as appropriate in the competitive free market.

Physicians, along with hospitals, have been targeted for special treatment under the program. Unlike any other profession or occupation, physicians would have terms of their professional practice dictated to them by the federal government. Under HealthCare physicians would be paid according to state-wide or areawide fee schedules (initially set at Medicare levels). Physicians would be required to enter into provider agreements with the government, be certified as participating physicians, and accept the schedule of fees as payment in full. There would be no differential based on physician specialty, and services by hospital-based radiologists, anesthesiologists and pathologists would be reimbursed as hospital services. While not requiring the same terms for physician reimbursement under the private plans, the bill **does** require that all private plans qualified under the employer guarantee program would have to provide services at such rates to assure equal access to services with those provided under HealthCare. This obfuscatory language and direction a statute would bear the seeds for government intervention — across the board — into all health care delivery for all persons. Such language would be the source of endless government regulation.

The program would also preempt state jurisdiction in areas that have traditionally been well controlled and properly regulated by state government. The bill would authorize the Secretary to define and certify various kinds of health care practitioner, (other than physicians) and to define the scope of their services, notwithstanding state law. Also, the proposal would assume the regulation of private health insurance policies, traditionally a state function. We believe that Congress should carefully consider this activity and the disruptive effect it would have on state government. We caution the Congress against unleashing upon the public yet another federal agency that would usurp well-defined and strongly rooted state activity.

Like the Health Care for All Americans Act, the administration's program would provide for an unwarranted restructuring of the nation's health care delivery system with its primary purpose being cost containment and control over health care delivery. This program should not be adopted by Congress.

Certain bills, designed to restructure the financing of insurance coverage, represent a major shift in the philosophic basis for national health insurance. These bills articulate a presumption that Americans are overinsured and that such coverage fosters abuse in the use of the health care system. These proposals are characterized as mechanisms for adding competition into the health care system and are designed to provide individuals various health insurance plans from which to choose, with varying economic impacts deriving from the selection of each plan. This type of program is based on the theory that individuals should no longer have economic incentives to overinsure and, given a choice, they will make a rational decision on the type of coverage they need.

Generally these bills would require employers, as a condition of deductibility of health insurance premiums for income tax purposes, to offer more than one insurance plan, usually including an HMO, a low-service option plan and high-service option plan. The employer would make the same contribution to an employee's health insurance benefit program regardless of which plan the employee selected, with the employee either making up the difference in the cost of a plan that was higher than the employer's contribution or by receiving a cash rebate for the difference between the employer's contribution and the cost of a low-cost plan. Catastrophic coverage is mandated in the plans along with improvement in Medicare coverage.

While characterized as national health insurance proposals, these bills are intended as cost-reduction programs. This would be accomplished by shifting to the consumer part of the cost of his care; as a result there would supposedly be a reduction in total system costs. An incentive is provided to the consumer to choose a less than comprehensive insurance policy.

Mr Chairman, we believe that consumers should have options available to them as to the type of coverage they desire. However, we have reservations about a program that might encourage the individual to acquire less coverage than is desirable. Experience has shown generally that individuals, given the opportunity, will seek full coverage. For example, Medicare is a program designed to provide for coinsurance and cost-sharing as a mechanism to restrain demand for health

services. Yet, millions of Medicare patients choose to pay additional premiums out of their limited income for supplemental insurance to assure broader coverage. For these individuals, the assurance of fuller coverage has been worth the cost of supplemental policies. Such action by patients dramatically decreases the expected reduction in total system costs that the co-payment mechanism was designed to provide.

CONCLUSION

The AMA is conscious of the need to improve access to health care so that all Americans can enjoy the benefits derived from modern health care and improved health status. The principles we stated above in making appropriate insurance coverage available will serve the American people well in improving access to health care services.

We object to those proposals now before the committee that are aimed at a radical system

of reform and restructuring instead of seeking an improvement of a proven system. We are troubled that the concern for health of our citizens is becoming secondary to concerns over costs. The radical restructuring contemplated in the Health Care for All Americans Act and the National Health Plan will not meet the needs of the American public and would not be beneficial.

The national health insurance debate is in its fourth decade. The rhetoric repeated over the years must be discounted in light of the great positive changes in our health system and the growing disrepute of government intervention in the private sector. We have seen unprecedented advances in medical services and patient care. As the Surgeon General stated, the American people have never been healthier. Today, nearly the entire population is covered by some form of program to pay medical bills. Selective improvements to an already existing and successful system will best achieve the desired goal. We urge the committee to take this approach. □

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Agency Assists Medical Employees in Filing Claims

Most physicians and hospital administrators are aware that filing health insurance claims has become an integral part of the health care system. The Health Care Financing Administration (HCFA) has recently joined with other groups in an effort to assist doctors and others in filing such claims.

An estimated 90% of the population has some form of health insurance. HCFA is a federal agency which is responsible for administering the Medicare and Medicaid program. This responsibility has caused HCFA to become aware of particular problems relating to filing insurance claims. In Oklahoma, Medicare and Medicaid expenditures to physicians and hospitals are estimated at between one-half to three-fourths of a billion dollars a year.

The federal agency is conducting Medicare-Medicaid workshops throughout the state to help alleviate problems in filing claims. The workshops are designed to inform hospital employees, physicians and durable medical equipment suppliers about federal insurance programs, how to properly code and file claims and also to offer an opportunity for individuals to ask questions. The workshops are conducted by HCFA, Oklahoma Blue Cross, Aetna Life and Casualty and the Department of Human Services.

Medical staffs of hospitals and physicians within a nine-county area were complimentary of the first workshop which was held in McAlester in April. The next workshop is scheduled for Enid on June 12.

Neal Thrift, HCFA Medicare on-site representative for Oklahoma, said that plans for workshops in 14 other areas of the state are being developed. He also said that selection of workshop sites should make it unnecessary for participants to travel more than 50 or 60 miles to attend. He said a letter will be sent to each physician, supplier and hospital announcing the date, time and location of the workshops.

HCFA is also involved in an effort to help reduce the load of paperwork involved in claim-filing. The agency, in conjunction with the Oklahoma Medicare and Medicaid contractors, is working with hospitals and physicians to establish a paperless billings system. According to a report, the development of an electronic claims submission system is still in

the embryonic stage, but the results, so far, appear promising. □

AMA Approves Guidelines For Prescribing Practices

A series of principles to be used as voluntary guidelines for prescribing practices have been approved by the American Medical Association and six other health organizations says a recent article in the *American Medical News*.

The federal Drug Enforcement Administration (DEA) has published this series of principles in a statement entitled "Guidelines For Prescribers Of Controlled Substances."

"The guidelines are a milestone in cooperation between the federal government and the health professions," says Peter S. Bensinger, head of the DEA.

The six general guidelines are: First, controlled substances have legitimate clinical usefulness and the prescriber should not hesitate to consider prescribing them when they are indicated for the comfort and well-being of patients.

Second, prescribing controlled substances for legitimate medical uses requires special caution because of their potential for abuse and dependence.

Third, good judgement should be used in administering and prescribing controlled substances so that diversion to illicit use is avoided and the possibility of development of drug dependence is minimized or prevented.

Fourth, physicians should guard against contributing to drug abuse through injudicious prescription writing practices, or by acquiescence to unwarranted demands of some patients.

Fifth, each prescriber should examine his or her individual prescribing practices to insure that all prescription orders for controlled substances are written with caution.

Sixth, physicians should make specific efforts to insure that multiple prescription orders are not being obtained by the patient from different prescribers.

The principles also include guidelines on prescribing orders for drugs in specific schedules. Copies of these guidelines can be obtained by contacting the Department of Mental Health, AMA, 535 N Dearborn, Chicago, Illinois 60610. □

Moonshine Causes Arsenic Poisonings

Five of 12 cases of arsenic poisoning diagnosed in a Georgia hospital since 1960 have been directly related to the consumption of moonshine whiskey says a report issued by the American Medical Association.

"Arsenic poisoning is a newly discovered hazard of illegal whiskey," the report said.

The production and consumption of moonshine has decreased since 1960, but in 1977 government agents discovered 64 stills in Georgia that produced nearly 70,000 gallons of illegal whiskey.

The report also said that current speculation about how arsenic gets into the moonshine is that it could be a contaminant of lead or solder used in the stills or that rat poison containing arsenic could also get into the stills since it is often used near the grain and mash stores. □

Some Prefer Home Birth

Advocates of home birth demand a new approach to birthing methods because they are unsatisfied with the conditions of hospital birthing care. G. Adamson, MD, obstetrician at Stanford University Medical Center in California explains in an article published in the *Journal of the American Medical Association* that home-birth-supporters say hospitals are too impersonal. The advocates of home birth also believe that homes provide necessary psychological advantages to the newborn and its entire family. The obstetrician said others have become proponents of this birthing method because of unpleasant experiences with earlier births in hospitals. Such experiences have included hospital regulations that do not permit the presence of family members and do not allow enough time with the newborn following birth.

The risks of home birth and the improvements that hospitals have made for the birthing process are the emphases made by the opponents of home birth. Adamson said physicians who have had patients with complicated pregnancies represent the primary opposition to home births. He said some complications can be anticipated prior to birth, but that other difficulties are unpredictable. He said most physicians prefer being near the sophisticated environment and surroundings of a modern hospital to help insure a safe delivery.


Adamson pointed out that many hospitals and physicians are attempting to provide birth environments that would be more conducive to the psychological needs of parents and infants.

Despite the differences of opinion, Adamson said most physicians and even people involved in home birthing agree that women having home births face higher risks than women having births in hospitals. □

Wrong Name Listed

The Oklahoma State Medical Association Auxiliary regrets that the name of Mrs. Kenneth (Gail) Miller appeared erroneously in the necrology report of the auxiliary program for the recent annual meeting. Mrs. Miller resides in McAlester, Oklahoma. □

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Deaths

ENNIS M. GULLATT, MD
1906-1980

OSMA President in 1966-67, Ennis M. Gullatt, MD, died April 26, 1980 in Ada. Doctor Gullatt, a native Oklahoman, was graduated from the University of Oklahoma College of Medicine in 1932. He specialized in general surgery and established his practice in Ada following his post-graduate training. He was active in many affairs of organized medicine and held numerous offices and appointments in the Pontotoc County Medical Society and in the state association. Last year the OSMA honored Doctor Gullatt with a Life Membership in recognition of his outstanding services to humanity and to his profession.

OLLIE McBRIDE, MD
1902-1980

An Ada physician since 1938, Ollie McBride, MD, died March 10, 1980. The internist was graduated from the University of Oklahoma College of Medicine in 1937 and was a past-president of the alumni association at his school of graduation. Doctor McBride was a founding member of the Oklahoma Medical Research Foundation and a Life Member of the Oklahoma State Medical Association.

ELTON W. LeHEW, MD
1904-1980

A former Oklahoma City and Guthrie physician, Elton W. LeHew, MD, died in Paris, Texas, May 3, 1980. He was a native of Pawnee, Oklahoma and was graduated from the University of Oklahoma College of Medicine in 1930. He had practiced in Pawnee, Guthrie and Oklahoma City before moving to Texas. Doctor LeHew was a member of the American Academy of Family Physicians.

PAUL C. GALLAHER, MD
1911-1980

Paul C. Gallaher, MD, Shawnee general practitioner, died April 20, 1980 in Oklahoma City. His medical degree was awarded from Northwestern University Medical School in 1936. Doctor Gallaher had been active in many medical circles, having served his county medical society as president and as a councilor to the Oklahoma State Medical Association. He was a Fellow of the International College of Surgeons and a member of the Southwestern Surgical Congress and the American Psychiatric Association. He was the brother of Clinton Gallaher, MD, Shawnee ophthalmologist, former president of the OSMA.

GERALD G. DOWNING, MD
1908-1980

Gerald G. Downing, MD, 71, retired Lawton physician, died March 17, 1980. Doctor Downing was graduated from Baylor University College of Medicine in 1933. Following two years of practice in Marlow, Oklahoma, he established his practice in Lawton. The OSMA had presented Dr Downing with a Life Membership in 1977.

ROBERT C. LAWSON, MD
1916-1980

Oklahoma City internist and endocrinologist, Robert C. Lawson, MD, died May 17, 1980. Born in Rockford, Illinois Dr Lawson was graduated from the University of Illinois College of Medicine in 1941. Following service with the US Medical Corps during World War II, he established his practice in Oklahoma City. He was certified by the American Board of Internal Medicine; a Fellow, American College of Physicians; a member of the American Society of Nuclear Medicine and the American Heart Association; and Chairman of the Planning Committee of Presbyterian Hospital. □

IN MEMORIAM

1979

<i>Walter M. Cox, MD</i>	<i>June 4</i>
<i>Francis W. Pruitt, MD</i>	<i>June 20</i>
<i>Paul M. Vickers, MD</i>	<i>June 26</i>
<i>John H. Robinson, MD</i>	<i>July 30</i>
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1980

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Erratum

The approximate budget of the Oklahoma State Department of Health was listed as \$442 million in the May issue of *The Journal*. This was in error as the approximate budget is \$42 million. This mistake is regretted. □

Bellmon Seeks Legislation For Pro-Competitive Health System

"I believe Congress should move now to introduce more opportunity for a market to develop in the health care system. There are no guarantees such an approach will work. We do know, however, that our traditional methods of legislating and regulating in the health care area have not been successful," stated Oklahoma Senator Henry Bellmon to the Subcommittee on Health of the Senate Committee at a two-day hearing in April.

The senator said that in 1978 total health care costs paid by consumers amounted to nearly \$192 billion or \$863 for every person in the United States. He said this figure is anticipated to increase to \$230 billion or a \$1,000 per person in 1980. The senator explained that health care costs have been increasing at an annual rate of 12-15% and are expected to continue climbing.

Bellmon said that government spending for Medicare and Medicaid has doubled every five years since the establishment of these programs in 1966 and he credited these programs with having helped many low-income, elderly and disabled people in receiving health care that would have been too costly for them to afford. But he also said the huge sums of federal funds that have been made available to these programs have caused accelerated inflation in health care prices.

"Prior to the initiation of Medicare and Medicaid in the mid-1960's inflation in the medical care sector was consistently less than in the rest of the economy. During the past five years, inflation in medical services has exceeded the general price rise by an average of nearly two percentage points per year," the senator said.

Bellmon explained that no federal action on a large-scale has been taken to help control the escalating health care costs. Instead, he pointed out that federal policies and regulations have actually promoted the use of high-cost home and outpatient care. He said some federal regulations have been imposed to control costs and to insure quality care through specific requirements for completing numerous forms and maintaining records. He said these tasks have been counter-productive. On the other hand, the senator said those institutions that do not enforce these regulations also seem to provide inadequate care for many patients.

"In short, our track record with the regulatory approach raises serious doubts that we can ever hope to rely on increased regulations or on improved federal management of Medicare and Medicaid as primary approaches for controlling costs and encouraging appropriate care in the field of health. Instead, we need a clear break with the past and new federal policies in both the tax and health program fields that help assure adequate care for all our citizens at reasonable costs."

Bellmon stressed the need for Congress to endorse a bill that will slow rising costs and decrease the regulatory burden of government intervention within the health care system. The senator explained that four current bills offer progress toward these objectives. Each of them holds to the concept of competition to reduce health care costs. Bellmon said the common elements included in each of these bills are, first, employers with a minimum number of employees would be required to offer a choice of health insurance plans including one low cost option. Second, employees selecting the low cost option would receive in direct payments or by some other fringe benefit, a percentage of the difference between the cost of that option and the high-cost option. Third, only payments to health insurance plans that conform to standards set by the legislation would be tax deductible business expenses for the employer.

The senator is a co-sponsor of one of the four pro-competitive bills, but he advocates the adoption of a bill including the best features of each of the four current proposals. He said such action would put the country on the road to a sensible national policy in health care financing.

"I recognize that 1981 will be a tight budgetary year, but I believe the problems in our health care system are so severe that we must proceed as rapidly as we can to institute fundamental reforms of the types proposed in these bills," the senator explained.

Bellmon believes that reformed legislation is necessary before any kind of catastrophic benefits plan is adopted. He says that a catastrophic benefit plan would cause an even greater rise in inflation in health care costs and shift increased numbers of patients into high-cost hospital beds and out of nursing homes and home care. Bellmon said he would oppose any kind of catastrophic benefit plan unless it was packaged with greater incentives

for low-cost alternatives and other protections against unnecessary use of high technological services.

Although Bellmon has expressed a reluctance toward federal regulating efforts, he commented about one federal program which he believes could serve as a national model for one kind of reform. This program is the Oklahoma Utilization Review System (OURS). The program reviews individual hospital data for a comparison with an established set of performance standards for institutions. Institutions that fail to meet certain criteria will be subjected to a period of monitoring.

In a report developed by the General Accounting Office, OURS data indicated that institutions subjected to a review system experienced cost reductions.

Bellmon says the factors that point to the need for competition in the health care system are, first, the absence of any clear relationship between the need for health services, their utilization and health expenditures, and second, the degree to which the reimbursement systems which are used by private insurers and the Medicare and Medicaid programs are inflationary and biased toward use of high-cost institutional services instead of lower-cost options such as outpatient and home care.

Bellmon concluded his address to the subcommittee by citing documented experiences to support the factors which he believes indicate a need for a pro-competitive health care system. He illustrated the problems with health systems not having a clear relationship between the need for health services, utilization and expenditures by citing the situation involving the five largest hospital service areas in Maine. Bellmon obtained this information from a report published by the Department of Health and Human Services. He said the report indicated that patients within areas receiving the higher health care rates because of greater levels of care had no greater need for the higher level of care than did patients in the areas receiving lower levels of health care at less cost. The senator said the report showed that variance in utilization rates are dependent on factors other than the state of health of the population. In this situation he said the residents paying higher health care costs were in an area served by more surgeons who were performing more surgical procedures. The hospitals also had higher admission rates.

Bellmon also cited examples of areas with

successful pro-competitive health care systems. He said in the area of Minneapolis-St Paul a health maintenance organization (HMO) has been available since 1978 as an alternative to the traditional health insurance options. The HMO attempted to increase enrollment by expanding its accessibility, controlling costs, and engaging in price competition. He said this caused a greater cost-consciousness among fee-for-service providers including physicians who began offering patients lower-cost prepaid alternatives. Hos-

pitals also became more cost-conscious in an effort to increase patronage by HMO patients.

The senator explained that Hawaii also has a pro-competitive health care system. He said the state is divided into two competing insuring provider groups. He says the patients of a doctor or hospital under one insurance program are likely to be covered by the competing program causing much influence in the areas of charges, fees and utilization. Bellmon said the results include effective cost control and low hospitalization rates in both insurance groups. □

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Quality Assurance

An intelligent, well-trained, conscientious physician conducts a thorough evaluation of a patient whose confidence he deserves and gains. Every recommendation made by the physician is meticulously tailored for that specific patient. Diagnostic studies are selected with care and discretion. Expedition, safety, accuracy and economy are major considerations influencing each decision. Every procedure, every treatment, every medication is the best one available in the physician's considered and competent professional opinion.

Radiographic studies are recommended. The patient is hesitant. She has read that x-rays are dangerous. They can cause cancer, leukemia and birth defects.

A computerized axial tomogram of the skull is recommended. The patient is unsure. She has read that they are terribly expensive, frequently unnecessary and that they also involve exposure to x-rays.

Xeromammograms are recommended. The patient is apprehensive. She has read that they cause cancer of the breast, are unreliable and, again, expose her to x-rays.

A minor surgical procedure is advised. The patient refuses. She has read that she should get a second opinion before submitting to any operation.

Diazepam is prescribed for the relief of distressing, frightening and severe symptoms. The patient is alarmed and insists on an alternative. She has read that diazepam is a dangerous, overprescribed drug which will cause serious side effects and addiction.

The physician is frustrated. He cannot use the best available tools to arrive at the best and most accurate diagnosis. He must settle for second or third best. He must forsake the benefits of thirty years of progress in medical diagnosis and therapy. He must prescribe drugs that are less effective, more dangerous and so ancient that his patient hasn't read about them in newspapers or magazines or heard about them on radio or television.

The patient is alarmed, disappointed and angry. Her physician is unreliable, inconsiderate and outrageously expensive. He couldn't find out what was wrong with her, tried to poison her with x-rays, wanted to butcher her with unnecessary surgery and prescribed a pill she'd never heard of. Instead of reassuring her, he just made her feel worse. She congratulates herself for refusing to settle for less than the best health care available. She gives thanks to her divinity for a free press and a vigilant, responsible government for saving her from the clutches of a charlatan. *MRJ*

Sometimes it is hard to tell if the regulators regulate because they feel like it is in someone's best interest or simply because they are regulators.

For many years the Oklahoma State Medical Association has conducted peer review activities, mostly because there was public need. The OSMA Peer Review Committee resolved fee disputes among physicians, insurance companies and patients and ruled on the appropriateness of care. As far as I am concerned, the committee has functioned extremely well, providing arbitration to anyone who wanted to take advantage of it. Over the last two years the OSMA Peer Review Committee has ruled in favor of the patient approximately 60 percent of the time. Sounds like everything is going great, right? Wrong!

The Federal Trade Commission recently informed physicians throughout the country that attempts to resolve fee disputes can and will be considered fee setting. This, they inform us, is a shameful practice being both unethical and illegal.

So how did we get by with it all these years?

In the past, medicine, being one of the learned professions, was not subject to anti-trust laws. However, not long ago the US Supreme Court changed that ruling, and now the FTC has become involved in the very manner



in which our profession regulates itself. We are told that physician advertising is desirable, and we are warned against taking any action to curb this practice. Although we are a voluntary association, the FTC has informed us that they can no longer trust us to regulate ourselves.

Now the FTC has gone one step farther and has threatened lawsuits unless medicine ceases its illegal practice of resolving fee problems. Faced with no other choice, the OSMA has suspended its Peer Review Committee, and our Board of Trustees will attempt to find ways of continuing this service without violating the FTC edict. I doubt very seriously if this will be possible.

The pharmaceutical industry is told that its advertising increases the cost of medications; we are told that our lack of advertising increases the cost of health care. Now we are told that performing services such as resolving fee disputes is a violation of federal laws.

Perhaps an even more extreme example is the US Justice Department's warning that health planners' efforts to get hospitals to limit services and beds might be a violation of federal anti-trust laws. It is difficult not to smile at such a turn of events, as it does demonstrate that the regulators are now regulating the regulators.

Is it possible that George Orwell's "1984" isn't far away?

Legionnaires Disease: Rapid Diagnosis by Direct Immunofluorescence of Sputum: Report of Three Sporadic Cases

BRUCE HURT, MD
Debra A. Hood MT(ASCP)

In cases of suspected Legionnaires disease examination of the sputum by direct immunofluorescence may provide rapid and accurate confirmation.

The story of Legionnaires disease has been a fascinating one ever since its dramatic arrival on the scene at the Philadelphia Convention in July, 1976. There have been few other disease processes studied so intensely by so many investigators in such a short period of time. Most physicians are now fully cognizant of the fact that *Legionella pneumophila* is by no means a medical curiosity, but instead is probably a ubiquitous pathogen which accounts for an appreciable percentage of pneumonias which previously had no identifiable cause. Unfortunately, development of rapid, sensitive and specific diagnostic modalities has not been as fast-paced as revelations concerning the epidemiology, clinical spectrum and bacteriol-

ogy of the organism. In the majority of cases the presumptive diagnosis of Legionnaires pneumonia is made by an astute diagnostician, with ultimate confirmation usually coming from demonstration of an antibody response to one of the four serogroups of *Legionella pneumophila*. Serological methods unfortunately, however, are retrospective and therefore seldom aid in the diagnosis of the acutely ill patient. Direct immunofluorescence has been used to demonstrate *Legionella pneumophila* in respiratory specimens, pleural fluid and lung tissue and is both rapid and specific. There have been approximately 15 previous cases in which direct immunofluorescence was positive on sputum or endotracheal aspirates.¹⁻⁶ We wish to report three additional cases diagnosed by direct immunofluorescence on expectorated sputum at our 500-bed community hospital over the past 10 months in an attempt to emphasize the potential diagnostic value of this procedure.

METHODS

For direct immunofluorescent examination fluorescein-labeled rabbit antibodies to *Legionella pneumophila*, serogroups I-IV, (supplied by the Center for Disease Control, Atlanta, Georgia) were applied to three or four sputum smears using positive and negative

Disease / HURT

controls and carefully adhering to previously published guidelines.⁷ The smears were examined on a Leitz-Dialux microscope, equipped with a 50 W mercury lamp, 2-KP490 interference filters and a BG23 filter.

Each sputum smear was scanned by one of us (D.H.) at 54 X and any fluorescent bacillary organisms were examined at 100 X to confirm correct size and staining characteristics. Smears were reported as negative only after the *entire* slide was examined (which usually took 30-45 minutes per slide, or 1.5-3.0 hours for all four slides on each patient). This latter prerequisite is at considerable variance with the published guidelines, which state that smears should be examined for a minimum of five minutes before being reported as negative. We reported smears as positive if any morphologically characteristic fluorescing bacteria were identified. The total number of organisms seen per slide was reported. Serology was performed using the indirect immunofluorescence technique, testing patient's serum against *Legionella pneumophila*, serogroup I.

RESULTS

Over the past ten months we have performed direct immunofluorescence on 13 randomly submitted expectorated sputums (on 13 different patients). Fluorescent bacilli characteristic of *Legionella pneumophila* were identified in the sputum of four of these 13 patients. The details of three cases are presented below. The fourth patient will not be presented in detail because he had been ill for less than one week at the time of this writing and therefore had not had sufficient time to develop an antibody response. We felt a specific antibody response was mandatory for confirmation because his sputum revealed a total of only two fluorescent bacteria on three slides. His fever, cough, severe headache, meningismus and myalgias, however, did respond promptly to peroral erythromycin.

CASE I

J.F., a 35-year-old white male, smoker, was in excellent health until three days prior to admission when he had rapid onset of fever to as high as 105° F. He felt "bad" in general but denied diarrhea, myalgias, pleuritic chest pain, disorientation or cough. On 6-25-79 he

was seen in a local physician's office and was found to have heavy proteinuria and a white blood cell count of 18,600/cu mm with 83% neutrophils and 17% bands. On admission that same day to St Anthony Hospital his oral temperature was 104.2° F, blood pressure 132/64, pulse 106/minute and respirations 20/minute. His only complaint was that he felt hot and weak. The physical findings were completely unremarkable.

The admission laboratory data revealed: serum phosphate 1.7 mg % (normal less than 2.5), sodium 133 mEq/l, CPK 70 U/l (normal less than 200), LDH 222 U/l (normal less than 225), SGOT 21 U/l (normal less than 40), BUN 15 mg %, creatinine 1.4 mg %, Hgb 14.9 grams %, Hct 40.4%, WBC 10,400 (50% neutrophils, 34% bands, 13% lymphocytes, 2% monocytes, and 1% metamyelocytes), 2+ proteinuria, trace ketonuria, and no hematuria. The chest x-ray on admission revealed a mild infiltrate in the left lower lobe. Sputum, blood and bone marrow cultures were negative. The impression was fever of undetermined origin and treatment was initiated with ampicillin one gram every six hours to which was later added methicillin one gram every six hours, both given intravenously.

The patient remained febrile spiking temperatures to as high as 106° F. By 6-28 the chest x-ray changes progressed to extensive, bilateral infiltrates, he had developed a dry cough (accompanied by one episode of hemoptysis) and had begun to complain of left-sided, pleuritic chest pain. On 6-29 he was disoriented, restless and tachypneic (60 respirations/minute) and arterial blood gas studies (breathing room air) revealed pH 7.28, Pao₂ 31 mmole, and Paco₂ 59 mmole. The possibility of Legionnaires disease was considered. He was given erythromycin 250 mg by mouth every six hours. A sputum obtained for direct immunofluorescence was positive for *Legionella pneumophila* with up to four organisms per smear. Approximately two hours after the first dose of erythromycin and one hour after the positive sputum examination, the patient suffered a fatal respiratory arrest. A nurse who had administered mouth-to-mouth resuscitation was treated prophylactically with erythromycin and remained well. No serological studies were performed on the nurse, however.

At necropsy the lungs were extremely heavy with a combined weight of 3,500 grams. There was a fibrinopurulent exudate over both lower

lobes. The cut surface was friable, meaty, light gray-red with an expressible grayish exudate. There were no abscesses, hemorrhages, emboli or infarcts. Microscopically the alveolar septa were preserved and there was an extensive mixed cellular exudate in the alveoli. In some alveoli the exudate was composed predominantly of macrophages while in other alveoli there was a prominent admixture of neutrophils, both patterns being superimposed on a proteinaceous and fibrinous background with scattered erythrocytes. The tissue gram stain was negative, but the Dieterle stain revealed variable numbers of bacillary forms with occasional intracellular organisms. Direct immunofluorescence of the autopsied lung was positive for *Legionella pneumophila* (serogroup I) in our laboratory and these results were confirmed at the Center for Disease Control, (CDC) Atlanta, Georgia.

Cultures of the lung were negative in our laboratory, but were positive for *Legionella pneumophila* (serogroup I) at the CDC. A serum specimen obtained on about the sixth day of illness was negative for antibody to *Legionella pneumophila*.

COMMENT

This case serves to emphasize that although statistically Legionnaires disease is more likely to afflict older age groups, this organism has the ability to strike with lethal rapidity in younger populations. The progression of pneumonia in Legionnaires disease can be extremely fast, as illustrated by this patient's clinical course which lasted eight days.

CASE II

C.D., a 25-year-old white female was admitted 10-21-79 after four days of fever, chills, myalgia and nonproductive cough. Her husband noted that she had been somewhat disoriented and confused. There was no diarrhea, pleuritic chest pain, or hemoptysis. Pertinent past history was that she had been discharged from the hospital only five days earlier after an uncomplicated vaginal delivery of a healthy infant. On admission her oral temperature was 101.5° F, pulse 88/minute, respirations 20/minute, BP 126/80. Physical examination revealed tubular breath sounds over the left posterior lung base. The chest x-ray on admission revealed a left lower lobe infiltrate.

Sputum and blood cultures obtained on admission were negative.

Laboratory studies done on admission included: Hgb 13.9 grams %, Hct 42.9%, WBC 15,600 (57% neutrophils, 24% bands, 15% lymphocytes, 4% monocytes, and 1% basophils), platelets 559,000, 2+ Proteinuria, 12-14 WBC/hpf, 1-2 RBC/hpf, PT 10.9 sec (with control 11.1 sec), normal serum phosphate, normal BUN, normal creatinine, normal albumin, bilirubin 0.6 mg %, alkaline phosphatase 110 U/l (normal less than 85), LDH 340 U/l (normal less than 200), SGOT 60 U/l (normal less than 50), CPK 450 U/l (normal less than 140), Sodium 137/mg %. Arterial blood gas studies (breathing room air) revealed pH 7.47, Pao₂ 71 mmole, and Paco₂ 27 mmole. Cold agglutinins were 1:8.

The admitting diagnosis was pneumonia of unknown cause and on 10-21 treatment was initiated with erythromycin 500 mg given by mouth every six hours. By 10-25 she felt substantially better and was afebrile. On that same day direct immunofluorescence examination of the sputum was reported as positive for *Legionella pneumophila* with 1-4 organisms per smear. Indirect immunofluorescence for antibodies to *Legionella pneumophila* revealed the acute serum (10-24) had a titer of less than 1:16 and the convalescent serum (11-14) had a titer of 1:256. Serologic studies for *Mycoplasma pneumoniae* by complement fixation on both sera were negative. The patient was discharged on 10-29 with complete resolution of her illness.

COMMENT

This patient had a fairly typical case of Legionnaires disease. It is intriguing to speculate on the possibility of nosocomial acquisition, although subsequent surveillance failed to disclose any additional cases. There has been one prior case of Legionnaires disease developing in a woman several days after delivery by cesarean section, but the possible association if any between Legionnaires disease and pregnancy is unclear.⁸

CASE III

L. W., a 34-year-old white female who was a heavy smoker had been in good health until four days prior to hospitalization, when she developed non-productive cough, fever,

generalized myalgias, sore throat, pleuritic chest pain and diarrhea. On 3-6-80 she was found to be obtunded by her husband. She was transferred to the hospital. Temperature was 105° F (rectal) and blood pressures recorded in the emergency room were as low as 64/40 mm Hg. She was somnolent and had diffuse crepitant and sibilant rales throughout her lungs. The chest x-ray disclosed perihilar infiltrates. The arterial blood gas studies (on five liters min of oxygen by nasal prong) revealed pH 7.39, Pao₂ 62 mmole and Paco₂ 28 mmole. Other pertinent laboratory findings were Hgb 13.9 grams %, Hct 42.8%, WBC 11,900 (75% neutrophils, 19% bands and 6% lymphocytes), platelet count 62,000, normal red cell morphology, PT 15.4 sec with control of 11.7 sec, PTT 54.1 sec with control of 40 sec, serum phosphate 2.0 mg % (normal 2.3-5.5), BUN 33 mg %, creatinine 1.8 mg %, sodium 134 mEq/l, bilirubin 1.3 mg %, LDH 420 U/l (normal less than 200), SGOT 165 U/l (normal less than 50), alkaline phosphatase 75 U/l (normal less than 85), and 2+ proteinuria. The initial impression was septic shock secondary to pneumonia, possibly Legionnaires disease. Antibiotics were given and included erythromycin one gram every six hours, chloramphenicol one gram every six hours, and tobramycin 80 mg every eight hours, all administered intravenously.

On 3-7 she remained lethargic and had bloody diarrhea. The platelet count was 49,000 and the peripheral blood smear revealed "burr" cells. At that time it was felt that she had disseminated intravascular coagulopathy. On 3-8 the platelet count was 17,000, bleeding was apparent from multiple sites (vaginal and rectal bleeding with hematemesis and hematuria), petechiae were present over the trunk and legs, and fibrin split products were greater than 10, but less than 40 mcg%. Platelets and fresh frozen plasma were administered in an attempt to correct apparent coagulation defects. Although sputum and four pre-antibiotic blood cultures were negative, a sputum sample submitted to St Anthony's laboratory for direct immunofluorescence study for Legionnaires disease was definitely positive, demonstrating 8-10 strongly fluorescing organisms per smear. Both intra- and extracellular fluorescing organisms were identified.

The patient continued to exhibit elevated

temperatures to as high as 104° F (rectal) despite antibiotic coverage. On 3-9 her condition had noticeably deteriorated with more progressive obtundation. Arterial blood gas studies (5 breathing liters min of oxygen by nasal prong) revealed pH 7.06, Pao₂ 45 mmole and Paco₂ 60 mmole. The chest x-ray revealed almost complete opacification of both lung fields. She was intubated and mechanical ventilation with 100% oxygen resulted in considerable improvement of the blood gases. Tobramycin and chloramphenicol were discontinued. Treatment with rifampin 600 mg given by mouth every 12 hours and oxacillin one gram given intravenously every four hours was initiated. By 3-10 she was considerably more alert, had decreased bleeding and the x-ray findings showed decreased opacities. An endotracheal tube aspirate was positive for *Legionella pneumophila*, although there were only 3-4 organisms per smear. Cold agglutinins were 1:128, raising the possibility of the presence of a *Mycoplasma pneumoniae* infection.

The patient showed progressive improvement and was completely afebrile by 3-15, had normal blood gases by 3-15, had normal chemistries by 3-22, had normal chest x-ray findings on 3-24, and was discharged on 3-28 after 18 days of rifampin and 22 days of erythromycin therapy.

Peroral erythromycin therapy was continued for seven days following discharge. When seen several weeks after discharge she was asymptomatic.

Unstained slides from the endotracheal aspirates obtained on 3-10 were examined by Patricia Harris at the CDC, using polyvalent and monovalent antisera, showing positive direct immunofluorescence to *Legionella pneumophila* (Serogroup I). The patient's sputum cultures were specifically negative for *Pseudomonas fluorescens*. Sera obtained on 3-10, 3-18, 4-1 and 4-23 were examined by indirect immunofluorescence techniques at both St Anthony Hospital and by Dr Hazel Wilkinson at CDC without any demonstrable response to *Legionella pneumophila* or to *Mycoplasma pneumoniae*.

COMMENT

Although this patient failed to develop specific antibodies to *Legionella pneumophila*, we feel that the strongly positive direct immunofluorescence study of the sputum which

was subsequently confirmed at CDC along with the patient's dramatic response to the addition of rifampin therapy justifies the inclusion of this case. In this regard, it is intriguing that in the original Philadelphia outbreak there were a small number of epidemiologically defined cases of Legionnaires disease which failed to develop specific antibodies.¹⁰ More recently two patients who were found to have positive direct immunofluorescence studies of sputum and responded promptly to erythromycin, failed to develop specific antibodies in appropriately timed specimens.⁶ These observations do appear to raise some interesting questions concerning the sensitivity of serologic responses in patients with Legionnaires disease. This latter case also points out that although erythromycin is generally accepted as the antibiotic of choice in Legionnaires disease, occasional patients do not exhibit the expected response. Rifampin would appear to be a logical addition to treatment in these cases, in view of the very low concentrations necessary to inhibit *Legionella pneumophila* in vitro.¹¹ The clinical, laboratory and radiographic improvement in this patient was dramatic when rifampin was added. This patient also had the interesting association of disseminated intravascular coagulopathy which has been described previously as occurring with Legionnaires disease.^{12, 13} Thrombocytopenia has also been observed.^{14, 15}

DISCUSSION

There are currently three methods readily available to substantiate a diagnosis of Legionnaires disease:

Bruce Hurt, MD, was graduated from the University of Texas Southwestern Medical School in 1973 and is certified by the American Board of Anatomic and Clinical Pathology with subspecialty in medical microbiology. He is a member of the American Society of Clinical Pathology, the College of American Pathology and the American Society of Microbiology.

Debra Ann Hood received her Bachelor of Science degree in laboratory technology in 1976 from the University of Oklahoma.

(1) Culture: Although culture is the most definitive method, it has a relatively low yield especially when dealing with sputum, from which there have been no isolates. However, attempts should still be made to culture *Legionella pneumophila* from upper respiratory secretions and the recent development of a selective medium may permit growth from such potentially contaminated specimens.¹⁶ It is important that the physician notify the laboratory of the suspicion of Legionnaires disease, so that the specimen will be plated on appropriate media. There have been two reports of positive cultures from transtracheal aspirates so that positive sputum cultures on selective media would appear to be a real possibility.^{17, 18}

(2) Serology: Specific antibodies seldom develop during the acute phase of Legionnaires disease. There is also evidence that some patients may have persistent high titer antibody to *Legionella pneumophila* for several years obscuring the diagnostic specificity of a single high titer of 1:256 or greater.⁹ It has also been suggested that early effective antibiotic therapy may blunt the antibody response, but this needs further investigation.¹⁹ Finally, as alluded to earlier, there is evidence to suggest that some patients with Legionnaires disease may fail to make antibody which is detectable by current techniques.⁶

(3) Direct Immunofluorescence: *Legionella pneumophila* has been identified by direct immunofluorescence examination of sputum, transtracheal aspirates, bronchial washings, pleural fluid, and lung. This technique is extremely specific when performed by experienced personnel and false positive results are very uncommon. A single strain of *Pseudomonas fluorescens* has been found which stains with the conjugate specific for *Legionella pneumophila*, however further examination of 22 other strains of this species failed to reveal any positive staining.⁷ Furthermore, over 400 pure cultures of bacteria other than *Legionella pneumophila* were negative with antisera specific for Legionnaires disease. These observations emphasize the extremely high diagnostic specificity of the direct

immunofluorescent reagents. In addition direct immunofluorescence is the most rapid technique available for the diagnosis of Legionnaires disease and results are usually reported two to three hours after receipt of the specimen.

It has been suggested that the greatest disadvantage of direct immunofluorescence procedures is the lack of sensitivity, especially in examination of sputum specimens. Broome, *et al*,¹ obtained positive direct immunofluorescence on only five of 21 (24%) sputum samples from patients with otherwise confirmed Legionnaires disease. In a prospective study two of four sputum specimens were positive, and two were suspect (less than six fluorescing bacteria per smear), suggesting that the sensitivity of direct immunofluorescence on sputum may be in a significant range.⁶ Our experience leads us to believe that if a sufficient length of time is spent studying the smear, the technique is extremely sensitive. However, negative direct immunofluorescence on sputum should not be taken as evidence against possible Legionnaires disease in any given case.

In summary, we have presented three cases of Legionnaires disease in which the primary mode of diagnosis was positive direct immunofluorescence examination of expectorated sputum. We feel this technique is specific, relatively sensitive, and currently is the most rapid method available to diagnose Legion-

naires disease. We would encourage physicians to utilize this procedure when clinical features of any case of pneumonia suggest the possibility of Legionnaires disease. □

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News From The Oklahoma State Department of Health

Recycling Cuts Costs

Hospitals, health care facilities and medical office buildings may be looking for ways to cut rising waste management costs. Recycling of office paper can be an important solution in reducing the volume of solid waste requiring collection and disposal.

In the past, low prices and unstable markets for recycled paper caused many businesses to reject recycling because they believed it was not cost effective. But in recent years, recycling markets for some types of papers have significantly improved.

There are many benefits from a paper recycling program. In addition to revenue received from the sale of paper to recycling firms, waste collection costs may be reduced. A large percentage of paper wastes generated in administrative offices, data processing centers, and print shops of hospitals and health care

facilities can be recycled. This is in addition to waste paper produced by doctors' offices.

As the volume of recycled material increases, the volume of waste requiring collection and disposal decreases. Collection fees can then be trimmed through the use of smaller trash dumpsters or reducing the frequency of the collection service. These savings may even be greater than the revenues from the sale of paper. The present janitorial staff could be utilized to collect waste paper separately from trash, thus eliminating the need for hiring additional personnel to handle the recycling project.

Resource recovery staff from the state health department are available to help design recycling projects specifically suited to the needs of business, industry and government agencies.

For more recycling information, contact the Industrial and Solid Waste Service, Oklahoma State Department of Health, (405) 271-5338. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR APRIL, 1980

DISEASE	APRIL 1980	APRIL 1979	MARCH 1980	Total To Date	
				1980	1979
Amebiasis	4	—	4	13	5
Aseptic Meningitis	3	1	3	12	5
Brucellosis	—	—	2	2	—
Encephalitis, Infectious	—	2	2	2	4
Gonorrhea (Use Form ODH-228)	1134	943	996	4433	3999
Hepatitis A	39	20	52	142	77
Hepatitis B	12	12	17	58	30
Hepatitis Unspecified	25	7	28	85	34
Measles (Rubeola)	163	17	149	322	20
Meningococcal Infections	1	—	5	10	16
Pertussis	—	—	5	8	2
Rabies (animal)	34	23	34	95	84
Rocky Mountain Spotted Fever	1	—	1	2	—
Rubella	—	2	1	1	18
Rubella (congenital)	—	—	—	—	—
Salmonellosis	18	13	9	51	56
Shigellosis	17	5	19	62	54
Syphilis (Use Form ODH-228)	11	5	5	31	29
Tetanus	—	—	—	—	—
Tuberculosis	24	23	21	94	127
Tularemia	—	—	—	—	—
Typhoid Fever	1	—	—	1	—

Medical Schools Receive Grants

Oklahoma medical schools received more than \$20,000 in grants from the American Medical Association Education and Research Foundation last spring.

A total of \$1,182,564 was distributed by AMA-ERF among every medical school in the United States and also to many Canadian schools according to James H. Sammons, MD, AMA executive vice-president. He explained that many of the funds are earmarked because many contributing physicians had requested that their alma mater receive their financial donations. Consequently, schools having a high number of contributing graduates generally received the largest grants.

In Oklahoma the largest grant amounted to \$19,551 and was issued to the University of Oklahoma Foundation, Inc., College of Medicine in Oklahoma City. Oral Roberts University, Tulsa, received \$127, the smallest grant distributed in the state and the University of Oklahoma Foundation, Inc., College of Medicine, Tulsa, obtained a \$740 grant.

The AMA-ERF channeled the largest grant of \$48,476 to Indiana University School of Medicine. The second highest grant amounted to \$37,208 and it was issued to the University of Tennessee College of Medicine. Northwestern University Medical School of Chicago received the third largest grant of \$34,092. □

Local Insurer Violates Law

A recent court decision determined that Blue Cross and Blue Shield of Oklahoma violated state law by not properly notifying a policyholder about a cause of delay in payment for a claim.

Shirley Howell, the insured, brought suit against Blue Cross and Blue Shield to recover on a health insurance contract for hospitalization expenses. She assigned the claim to the hospital and the proof of claim was received by the insurer on July 23, 1976. Eleven days later the Oklahoma insurer requested copies of the nurses' notes, doctors' orders and admitting history and physical to decide if Howell's case complied with the terms of her contracted policy.

In the original trial, the jury had to decide if the cause for the patient's hospitalization conformed to the contract of her insurance. The court concluded that she should recover payment of claim. The court also determined that the insurer should pay attorney fees.

The insurer appealed to seek a reversal of the trial court's decision to award the patient attorney fees. The patient cross-appealed alleging that she was also entitled to attorney fees for post-trial hearings and for the preparation of the appeal.

The insurer admitted that it did not send a statutorily required notice by mail stating that there would be a delay in payment. But the company said its request for the other information should have indicated that there would be a delay in payment of a claim where the claim is not paid within thirty days after the receipt of proof of loss. The insurer argued that although the notice did not include a statement about delay in payment of the claim, it said its request for additional information was a usual trade practice and that the hospital understood that the request meant there would be a delay in payment.

In a similar case in Kansas, the policy provided for payment within 60-days after receipt of proof of loss. This insurer had also requested additional information. The court decided that the time for payment began from the receipt of the proof of loss and that the 60-day payment period should not be upheld because the insurer required more information from the insured.

Although the policyholder had assigned the policy to the hospital the patient was still liable for the hospital bill. In the Howell case, the insurer did not notify the patient to explain that the claim would not be paid. The court determined that Blue Cross and Blue Shield failed to comply with the statute and that attorney fees were properly awarded by the trial court. □

Medical Professional To Become More Involved in State Executions



Armond Start, MD

A question understandably exists in the minds of medical professionals and state employees across the nation: Is participation by doctors in a new form of capital punishment — death by lethal injection — unethical?

Oklahoma is among the country's four states which have adopted lethal drugs as its method of execution. Among the reasons legislators selected this method over electrocution are, first, they considered death by injection of lethal drugs to be more humane and second, it is less expensive.

The subject, of course, is controversial, and Oklahoma has received its share of criticism. Recently, a lawyer and physician from the Harvard School of Medicine cited Oklahoma's new policies on death by lethal injection in an article published in the *New England Journal of Medicine*. The article condemned all forms of medical participation in capital punishment. It emphasized that a physician should use his knowledge and skill for healing purposes only and said that several international medical organizations have considered that any degree of participation by a medical professional is unethical.

Armond Start, MD, a pediatrician and state employee, comments on several points involving this issue.

Start assumed the position as medical director of the Oklahoma Department of Corrections after state legislators had already adopted the new capital punishment statute. His response to the *New England Journal's* article is to point out that our country's courts and juries actually execute a prisoner with their decision. He says state employees merely obey the law.

"I am not so sure that not to obey the law wouldn't be in violation of ethics, too," he commented. "But I also think the authors of the (*New England Journal of Medicine* article) confuse the issue of medical ethics with personal morality."

In Oklahoma, the law specifies that executions will be conducted by volunteers. Start

said the major point of concern should be that each volunteer determines if his participation is morally right. Actual participation could involve various tasks such as inserting an intravenous device or training another individual to perform the duties.

Start said volunteers who were involved in Oklahoma's previous methods of execution were employees from the Corrections Department. "There is no reason why that has to be. But a volunteer would probably have to be a state employee," he said.

The medical director said if no individuals volunteer, he would probably be asked to perform the task. "I plan to discourage my staff from participating because I know I wouldn't want to volunteer myself . . .," he said.

Since the adoption of Oklahoma's new capital punishment law, no prisoner has been executed and Start said he does not anticipate an execution in the immediate future. However, this delay has not caused the medical director to ignore the question. The line is fine between Start's role as a state employee with responsibility to carry out the law and his personal moral convictions.

"For the last two-and-a-half years, I have been thinking about this issue and what I will do, but I still haven't decided," he said.

Start said he has been misquoted by the media and that he has become reluctant to discuss Oklahoma's new capital punishment law. He also said it has become the subject of too much sensationalism. The medical director illustrated this kind of sensationalism by citing a headline which appeared in a West German newspaper. The headline was "Oklahoma Doctors Kill Prisoners."

Start says the department's role in state-ordered executions conflicts with the primary purpose of the department which is to provide quality health care to inmates.

"Capital punishment, regardless of the method, does not comply with that goal," Start said.

The medical director commented about how, in the last two years, the department has made an about-face by achieving much success in its goal to provide better health care to inmates. He said the department is now trying to improve its mental health services.

"The fight to help a prisoner suffering from mental illness within the environment of a prison is most difficult," said Start.

He also remarked that officers and the

administration face a tough job in providing any kind of care to prisoners because the task involves helping those individuals who have been rejected by society.

"We have the responsibility of taking care of those individuals that society's institutions such as schools, churches and homes have failed to care for. It's a tough job and it seems as though nobody really appreciates our effort, not even the state leadership."

The effort to provide quality health care to prisoners involves winning some degree of trust from them. But Start said he could understand how a prisoner might not trust the department if some of the staff become involved in the state ordered executions of other inmates.

In addition to the ironic conflict involving the Correction Department's role in capital punishment and its primary purpose to provide

better health care to inmates, the medical director said he has his own doubts about capital punishment.

Start said it would be less of a problem for him, if for example someone robbed a store and murdered a person, and the convicted prisoner was immediately executed. But he said the judicial system's delay from the day of sentencing until execution often allows enough time for prisoners to change. He also said relationships tend to develop between the department's staff and the inmates and this makes it even more difficult.

Twenty-four prisoners in Oklahoma await their day of execution, and the medical director said he has noticed apparent changes in the lives of some of these inmates.

"It would be difficult for me to see a prisoner executed knowing that he is a different person from when he committed his crime," Start concluded. □

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New Study Refutes Beliefs On Connection Between Weight and Health

The results of a 24-year study have disproved earlier beliefs that underweight individuals live longer than people of normal weight. The study was performed by the American Medical Association and released recently.

The findings were announced after a long term study involving more than 5,200 men and women between the ages of 30 and 60 years. Paul Sorlie, MD, of the National Heart, Lung and Blood Institute said the study proved what researchers believed all along . . . that the death rate of obese individuals exceeds that of people of average weight. He said until now, however, it has been generally believed that underweight people outlive individuals of normal weight. This belief was based upon the results of a study conducted by the insurance industry in 1959.

Sorlie said researchers on the AMA study found this not to be the case, as it was found that underweight individuals generally do not outlive people of normal weight. □

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Hoyt D. Gardner, MD

"... we are living in the golden age of medicine," Dr Hoyt D. Gardner, president of the American Medical Association said. Gardner addressed the opening session of the House of Delegates of the Oklahoma State Medical Association during the 1980 annual meeting held in May. He said medicine is among the four professions to which people have always looked for guidance. The others are law, religion and education.

Lifestyles among adolescents — Dr Robert DuPont, practicing psychiatrist and president of the Institute for Behavior and Health, Inc, Washington, DC, focused upon this topic when he spoke at the OSMA Auxiliary Luncheon during the annual meeting. He said such lifestyles have produced the mentality, now prevalent in all ages, of "you do your thing and I'll do mine." He said this attitude must be turned to, "what you do influences me and what I do influences you because we care."

"As citizens of Oklahoma, you are practicing in the finest place in the country. The future looks just as good," Governor George Nigh told the OSMA House of Delegates in its opening session.

He said only four other states in the union have lower taxes than Oklahoma. In addition, he reminded the physicians that every tax payer in the state experienced an income tax reduction last year and that the legislature is considering future tax cuts.

Since becoming governor, Nigh said he has been involved with OSMA and other medical services in all areas of the state. "I am very proud and I appreciate the type of working relationship I have with OSMA," the governor said.

The Oklahoma Medical Political Action Committee met during the three-day annual meeting. A guest speaker for the group was Dr Michael Levis, chairman of the American Political Action Committee (AMPAC). He discussed the conciliation agreement signed by AMPAC and the Federal Election Commission (FEC) last November. The agreement limits AMPAC contributions to candidates and their political committees to \$5,000 when the contributions are mixed with contributions of state medical political action committees.

William M. Leebron, MD, OSMA president (below left) and Governor George Nigh (below right).



"Faith is the assurance of things hoped for, the conviction of things not seen," Dr William S. Banowsky, president of the University of Oklahoma, said to the first OSMA President's Prayer Breakfast.

Banowsky said a problem throughout the world today is apathy. He said boredom in life is often the end result of seeking after temporal things that will eventually pass away. The OU president says motivation and fulfillment come through believing in those things that are eternal and not by seeking materialism.



Robert DuPont, MD



Michael Levis, MD



William S. Banowsky, PhD

Scheduled throughout the three-day annual meeting were a variety of continuing medical education seminars providing Category I credit toward the Physicians Recognition Award.

The Advanced Cardiac Life Support Seminar was one of the several courses available to physicians during the annual meeting. It involved ten lectures and eight station sites for on-the-job-training using a mannequin. Following the course each participating physician took a test and those passing it were given a providers card in Advanced Cardiac Life Support issued by the American Heart Association.

OSMA 1980 Annual Meeting Oklahoma City



In two-man cardiac pulmonary resuscitation one gives mouth to mouth resuscitation while the other compresses the victim's sternum five times per breath.



Mrs. Raymond M. Yow, (left) president, Southern Medical Association Auxiliary participated in small discussion groups during the seminar for physicians' families.



Mrs. Ben Johnson, Jr., president of the American Medical Association Auxiliary, Inc. addressed the state auxiliary's House of Delegates.

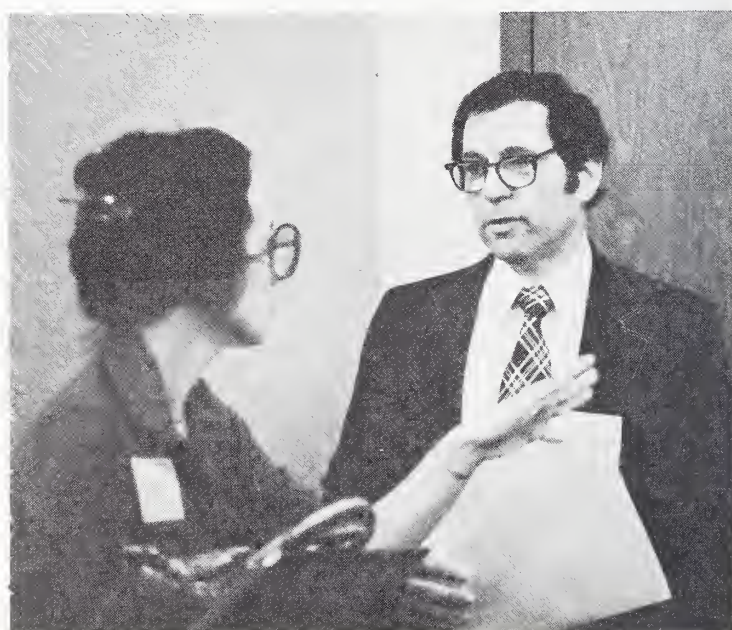
Family members joined the doctors in a special seminar entitled "Focus on the Physician's Family." Perry Berman, MD, a specialist in two-career marriages, discussed common problems experienced by physician-families. Later, the group broke up into small discussion groups led by Oklahoma City psychiatrists. The seminar was co-sponsored by OSMA and the OSMA Auxiliary.



A participant in the seminar "Focus on the Physician's Family," discussed a situation with guest speaker, Dr Perry Berman (right).



Mrs. Margaret Eskridge, (left) incoming OSMA Auxiliary president finds a few spare minutes to relax in the hospitality room with Dee Hampton, (right) executive director of the Oklahoma County Medical Society.



John A. Blaschke, MD



Dr William M. Leebron (right) presents outgoing auxiliary president, Shirley Forsythe, Tulsa, (left) with a gift on behalf of the Oklahoma State Medical Association. The presentation was made during the OSMA President's Banquet.



The President's Banquet

The President's Banquet honoring outgoing president, William M. Leebron, MD, and incoming president, Floyd F. Miller, MD, was hosted by John A. Blaschke, MD, 1980 annual meeting chairman. The banquet featured special entertainment presented by "The Singing Doctors," Springfield, Missouri. The group is comprised of physicians who organized in the 1950s and have since traveled throughout the country entertaining medical groups.



"The Singing Doctors"



Hoyt D. Gardner, MD, (left) AMA president congratulates incoming OSMA president, (right) Floyd F. Miller, MD, Tulsa.

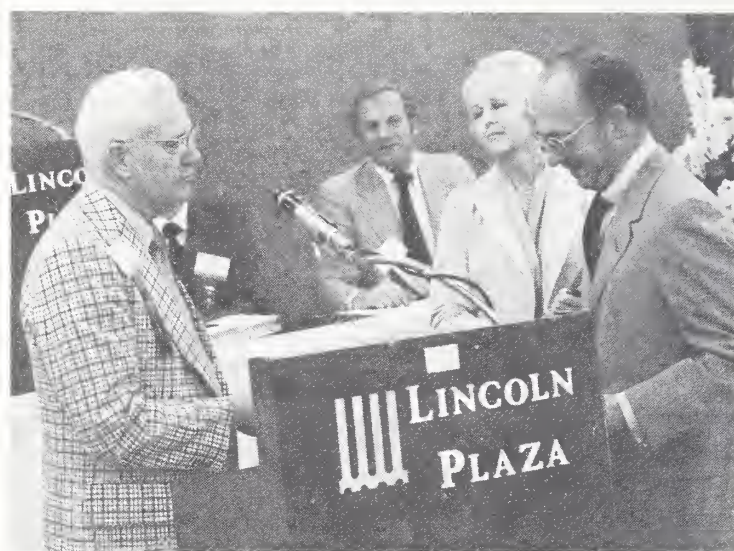


This year, the exhibit hall area included displays representing seventeen states and Washington, DC. The displays encircled a lounge and at noon OSMA offered complimentary lunches in the area. Between seminars, business meetings and during lunch physicians frequented the lounge to relax.

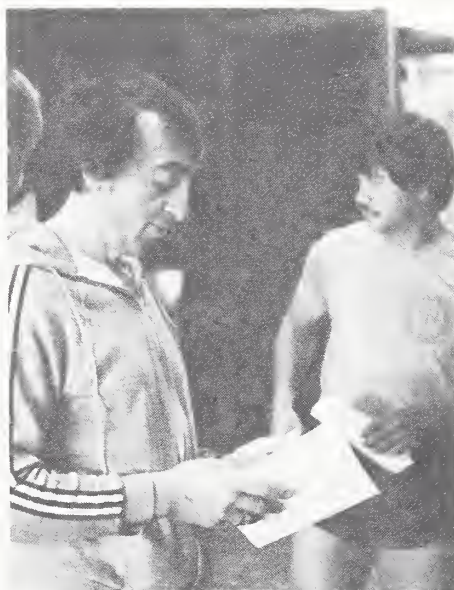
OSMA AWARDS & CONTESTS

They're off! These doctors competed in the OSMA 3,000-meter run held during the 1980 annual meeting. Pictured from left to right are: Dr Dan E. Woodson, Oklahoma City; Dr John A. Blaschke, Oklahoma City; Dr Perry Taaca, Oklahoma City; Dr John W. Drake, Oklahoma City; Dr John M. Salmeron, Oklahoma City; and Dr Robert M. Lambert, Norman.

Elvin M. Amen, MD, (left) presented awards to Mary Kathryn Luton, (center) director of patient relations for Oklahoma City's Presbyterian Hospital and Stanton L. Young, (right) president of Young Companies as co-recipients of the third annual Outstanding Layman Award of the Oklahoma State Medical Association. The OSMA Board of Trustees recognizes individuals with these awards for outstanding contributions to the field of medicine. Luton initiated the establishment of the Hospitality House, a facility for family members of hospitalized patients. Young was honored for his service in a variety of medical organizations.



A Distinguished Service Award was presented by Ed Norfleet, MD, (right) to Jack Spears (left) from the OSMA House of Delegates and the Board of Trustees. Spears was honored for his service of more than 29 years to the medical profession as executive director of the Tulsa County Medical Society.



Dr John M. Salmeron, Oklahoma City studies a map explaining the course for the OSMA 3,000-meter run.



Perry Taaca, MD

OSMA 3,000 Meter Run . . .

PHYSICIANS COMPETE IN OSMA EVENTS

Competitive-minded physicians could participate in a variety of contests held during the 1980 annual meeting.

Twelve jogging enthusiasts raced against the clock early Friday morning in a 3,000-meter run. Dr Perry Taaca, Oklahoma City, won the event by completing the run in nine minutes and two seconds. Dr Robert M. Lambert, Oklahoma City, finished in nine minutes and twenty-three seconds.

The winners of the 1980 OSMA Tennis Tournament held May 8-9 were: Men's singles—first, Dr Robert W. Howard, Ponca City and second, Dr Kenneth P. Coffey, Okmulgee; Men's doubles—first, Dr Ken Coffey and Dr Farris W. Coggins, Oklahoma City; second, Dr Robert W. Howard and Dr Stephen Stotts, Ponca City; Women's singles—first, June Perry, Oklahoma City and second, Gail Coffey, Okmulgee; Women's doubles—first, Mary Coggins, Oklahoma City and Norma Johnson, Shawnee; second, Kay Hackney, Edmond and Marilyn Bethea, Oklahoma City.

Winners of the OSMA Golf Tournament held on May 9 were: Low Gross Score — first, Dr L. E. Silvey, Bethany and second, Dr William C. McCurdy, Norman. Low Net Score winners were first, Dr Willard B. Moran, Oklahoma City, and second, Dr Donald L. Cooper, Stillwater.

More than seventy photographs were entered in the 1980 Annual Meeting Photo Contest. The print named "Best of Show" was entered by Dr Stanley Muenzler, Oklahoma City. In the color division, first place went to Dr D. L. Moore, Tulsa; Dr Gerald Rogers, Oklahoma City, received second and Dr Gerald F. Pribil, Tulsa placed third. Dr Arnold Greensher, Tulsa, received first and second in the black and white division. Third place went to Dr Ray V. McIntyre, Kingfisher.

Others received "honorable mention" awards. They were: Sylvia Worcester, Oklahoma City; Dr H.V.L. Sapper, Oklahoma City; Dr James L. Dunagin, Oklahoma City; Dr James B. Eskridge III, Oklahoma City; Dr Gerald F. Pribil, Tulsa; Dr Stanley Muenzler, Oklahoma City; Dr W. G. Long, Purcell and Richard Hess, OSMA associate executive director.

Judges for this event were Ned Hockman, professor of journalism and director of the motion picture department at the H. H. Herbert School of Journalism at the University of Ok-

lahoma. John Nesom, Norman, professional free-lance photographer helped in judging the contest. □



The OSMA Medical Journalism Award was presented to Jack Bowen (right) of KOCO-TV by M. Joe Crosthwait, MD, (left) chairman of the OSMA Council on Professional and Public Relations. This award is not given annually. It is usually issued when the Council decides an individual has made outstanding contributions in medical reporting. The Council cited Bowen for his efforts in medical reporting and for his demonstration of compassion and caring through Channel 5's special features of Wednesday's Child and Pet Saver.



William M. Leebron, MD, (left) congratulates Ed Calhoon, MD, (right) for being named the recipient of the A. H. Robins Award.

Deaths

JOHN E. HIGHLAND, MD 1914-1980

John E. Highland, MD, whose medical practice in Miami, Oklahoma, spanned 34 years, died at Grand Lake April 28, 1980. He was graduated from the University of Oklahoma College of Medicine in 1939. Following a brief period of practice in Oklahoma City, he established his practice in Miami where he remained until his death. Doctor Highland had been active in medical circles having served on the Board of the American Cancer Society. He was a charter Fellow of the American Academy of Family Physicians and a member of the British Academy of Medicine.

H. VIOLET STURGEON MINTON, MD 1908-1980

A past vice-president of the Oklahoma State Medical Association, H. Violet Sturgeon Minton, MD, died in Enid, April 29, 1980. A native of Hennessey, Dr Minton was graduated from the University of Oklahoma College of Medicine in 1933 and returned to Hennessey to practice. In 1961 she completed a residency in psychiatry and became a consultant in the Midwest-Del City school system. She had served the OSMA as vice-president for two successive terms from 1944 to 1946. She was an OSMA Life Member.

WILLIAM F. THOMAS, JR., MD 1911-1980

A longtime Tulsa obstetrician and gynecologist, William F. Thomas, Jr., MD, died May 17, 1980. Born in De-Queen, Arkansas, Doctor Thomas was graduated from Tulane University

School of Medicine in 1937 and returned to Tulsa in 1946. In 1978 he was named Doctor of the Year by the Tulsa County Medical Society Auxiliary and was the first recipient of the Outstanding Attending Physician Award presented by the University of Oklahoma Tulsa Medical College. He was considered a pioneer in the practice of obstetrics and gynecology in Tulsa and was a member of numerous professional organizations.

EDWARD A. ABERNETHY, MD 1879-1980

Edward A. Abernethy, MD, 101, died May 9, 1980. Abernethy was born in Thornton, Arkansas and moved to Altus, Oklahoma in 1909. He was graduated from the Kentucky School of Medicine in 1907 and was active in the medical profession in Altus for over 60 years, retiring in 1967. Specializing in ophthalmology Doctor Abernethy was a Life member of the OSMA and the father of E. A. Abernethy, MD, Enid.

C. W. ARRENDELL, MD 1891-1980

C. W. Arrendell, MD, 89, died in Norman on May 6, 1980. Doctor Arrendell had practiced in Ponca City since 1917. He received his medical degree from Tulane University School of Medicine. The OSMA had presented Dr Arrendell with a Life Membership in recognition of his years of service to his profession and to humanity. He was the father of C. W. Arrendell, Jr., MD, with whom he had been associated in practice in Ponca City. □

IN MEMORIAM

1979

<i>Walter M. Cox, MD</i>	<i>June 4</i>
<i>Francis W. Pruitt, MD</i>	<i>June 20</i>
<i>Paul M. Vickers, MD</i>	<i>June 26</i>
<i>John H. Robinson, MD</i>	<i>July 30</i>
<i>Marvin Elkins, MD</i>	<i>August 20</i>
<i>Hugh J. Evans, MD</i>	<i>August 25</i>
<i>Walter H. Dersch, Jr., MD</i>	<i>August 26</i>
<i>Caspar A. Hicks, MD</i>	<i>August 27</i>
<i>William R. Schmieding, PhD</i>	<i>September 16</i>
<i>Ernest Lachman, MD</i>	<i>September 21</i>
<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>
<i>Charles H. Eads, MD</i>	<i>March 8</i>
<i>Paul C. Gallaher, MD</i>	<i>April 20</i>
<i>Ennis M. Gullatt, MD</i>	<i>April 26</i>
<i>Elton W. LeHew, MD</i>	<i>May 3</i>
<i>Robert C. Lawson, MD</i>	<i>May 17</i>
<i>John E. Highland, MD</i>	<i>April 28</i>
<i>H. Violet Sturgeon Minton, MD</i>	<i>April 29</i>
<i>C. W. Arrendell, MD</i>	<i>May 6</i>
<i>Edward A. Abernethy, MD</i>	<i>May 9</i>
<i>William F. Thomas, Jr., MD</i>	<i>May 17</i>

Decision Could Threaten Privacy Of Patient Records

A recent Supreme Court decision could affect the security and privacy of patient records in physicians' offices, according to a statement issued by the American Medical Association and the American Psychiatric Association.

The court upheld the right of police to search files of a Stanford University newspaper for photographs of a campus episode involving a crime. A physician representing the AMA and the APA told the Senate Judiciary Committee that this decision will limit the degree of pri-

vacy of patients' records maintained in physicians' offices.

He pointed out that having a search procedure by policy instead of by subpoena request for information will not allow the physician to challenge the disclosure of his records on grounds that the information is privileged and confidential. He said the ruling is actually contrary to established AMA and APA policy concerning patient-physician relationships and medical ethics.

The physician encouraged Congress to support legislation introduced by Senators Birch Bayh (D-IN) and Max Baucus (D-MT) to help protect the privileged relationships between doctors and patients and others protected by First Amendment rights from illegal search and seizure. □

Manufacturer Voices Safety of New Drug

The manufacturer of a new drug asserts confidence about the safety and effectiveness of its product used in the treatment of stomach ulcers.

In recent years fewer patients have needed surgery for stomach ulcers because of the employment of a new line of drugs including cimetidine (Tagamet).

A report in an April issue of the *Journal of the American Medical Association* describes a study designed to appraise the impact of cimetidine. The study began only seven months after the drug was approved for marketing and within three months, data were collected on almost 10,000 patients. More than 1,000 physicians across the nation cooperated with researchers by submitting reports on nine to ten patients who were taking the drug.

The study indicated that only 4.4% of the patients experienced the adverse effects of nausea, vomiting, diarrhea, pain, cramps, dizziness and headache. This post-market study indicated that the percentage of adverse effects did not increase from pre-market tests, but matched the figures for adverse effects in the earlier tests.

These test results involving animals and humans have caused the manufacturers of cimetidine to remain confident about the safety and effectiveness of the drug. □

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Name(s) _____

Home Address _____

City _____ State _____ Zip _____

Miscellaneous Advertisements

VACATION at 9,000 feet. Winter Park chalet, sleeps 10-12. All amenities. In area: Golf, tennis, fishing, float trips, hiking, trail riding, more. Summer rates. John D. Douthit, MD, 1025 Garfield, Fort Collins, CO 80524, 303 484-6587.

FAMILY PRACTICE AVAILABLE. Will require little or no financing. Owner wishes to phase out practice. In one of smaller Oklahoma cities. Good offices in convenient location near excellent hospitals. Confidential correspondence invited. Reply to Key R, *The Journal, Oklahoma State Medical Association*, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

FOR SALE: Fiberoptic colonoscope — Olympus CFB-2 and an Olympus eight source CLE-3, mint condition. Bargain. G. L. Berkenbile, MD, 918 742-3341.

FURNISHED OFFICE SPACE, X-ray and laboratory facilities available in St Anthony area. Contact Key M, *The Journal, Oklahoma State Medical Association*, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

INTERNIST - CARDIOLOGIST, board eligible. Broad medical experience. Pilot. 1950 OU medical graduate desires to move back to Oklahoma. Office 214 758-2741, residence 759-2641. J. W. Rentfrow, MD, 705 North 4th Street, Longview, Texas 75601.

OFFICE SPACE AVAILABLE. Excellent location, 5770 Northwest Highway. 7,000 square feet (five up, two down). For lease or sale. Will consider financing. Capital Security Life Insurance, Oklahoma City, 721-7300.

COMPLETELY FURNISHED for lease or sale; southwest Oklahoma City. Retiring after 50 years of practice in medicine. X-ray; three examining rooms; private office; laboratory. We will carry the loan, if necessary. Contact Key M, *The Journal, Oklahoma State Medical Association*, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

FOR SALE. AMS Urodynamics equipment. Two channels. Model 7720. Almost new, 1979 model. Capability to do CMG, EMG, urethral pressure profile and uroflowmetry. Price negotiable, J. B. Ortega, MD, Inc., P.O. Box 1324, Clinton, Oklahoma 73601, 405 323-2957.

POSITION OPEN. Need full time physician for general practice in established clinic. Community of 10,000. Active churches and civic clubs, little league. Thirty minutes from metropolitan Oklahoma City. Position open July 1, 1980. Contact Wm. M. Pierce, clinic manager, P.O. Box 523, Crescent, Oklahoma 73028. □

Proceedings of the 74th Annual Session of the House of Delegates of the Oklahoma State Medical Association

OPENING SESSION

I. CALL TO ORDER:

The House of Delegates convened its 74th Annual Session in the Lincoln Plaza Forum, Oklahoma City, Oklahoma, on May 8, 1980. The Vice-Speaker, George Kamp, MD, Tulsa, called the meeting to order at 12:20 pm.

II. INVOCATION:

The invocation was delivered by John Blaschke, MD, Oklahoma City, Chairman of the Annual Meeting Committee.

III. INTRODUCTION OF SPECIAL GUESTS:

Doctor Kamp introduced Mrs. John Forsythe, President of the Auxiliary to the Oklahoma State Medical Association. Mrs. Forsythe expressed that the Auxiliary is available to help the OSMA in any way, and asked for the members' continued support in these times of change.

Mrs. Forsythe then introduced Mrs. Ben Johnson, President of the American Medical Association Auxiliary, who spoke to the delegates about supporting their Auxiliary and involving them on appropriate councils. Mrs. James B. Eskridge, incoming president of the Auxiliary, was introduced.

The AMA-ERF fund checks were presented by Mrs. Forsythe. Dr Tom Lynn, Dean of the Oklahoma University College of Medicine, received a check for \$19,551.00. Doctor Edward Tomsovic, Dean of the University of Oklahoma Tulsa Medical College, received a check in the amount of \$740.00, and a check in the amount of \$127.70 was presented to Dr Milton Olsen, Assistant Dean for Student Affairs of Oral Roberts University.

Doctor William Leebron introduced Governor George Nigh, who welcomed the delegates and spoke about items of interest to all people in the state of Oklahoma.

IV. REPORT OF THE CREDENTIALS COMMITTEE:

The presence of a quorum was reported by

Ed Calhoon, MD, Beaver, Chairman of the Credentials Committee.

V. CONSIDERATION OF MINUTES OF PREVIOUS MEETING:

A motion was made that the minutes of the 1979 Annual Meeting be approved. The motion passed unanimously.

VI. APPOINTMENT OF COMMITTEES OF THE HOUSE:

Doctor Kamp appointed the following committees to assist in the conduct of the meeting:

CREDENTIALS COMMITTEE

Ed Calhoon, MD, Beaver, Chairman
Thomas Lynn, MD, Oklahoma City
David Browning, Jr., MD, Tulsa

TELLERS

John Williams, MD, Enid
Edward Dalton, MD, Oklahoma City
Lynwood Heaver, MD, Tulsa

SERGEANTS-AT-ARMS

Hillard Denyer, MD, Bartlesville
Kenneth Whittington, MD, Bethany

REFERENCE COMMITTEE NO. I

Frank Buster, MD, Cheyenne, Chairman
Joe Stafford, MD, Enid
Irwin Brown, MD, Oklahoma City
David Rose, MD, Ardmore
Layton Runkle, MD, Norman
James Wise, MD, Oklahoma City
Joseph Salamy, MD, Tulsa

REFERENCE COMMITTEE NO. II

Don Rhinehart, MD, Oklahoma City, Chairman
Ralph Buller, MD, Hydro
Theodore Fortmann, MD, Okarche
A. C. Roberson, MD, Anadarko
Ray Cornelison, MD, Midwest City
Boyd O. Whitlock, MD, Tulsa
Bruce Stoesser, MD, Tulsa

REFERENCE COMMITTEE NO. III

Michael Haugh, MD, Tulsa, Chairman
Joseph Krueger, MD, Altus
H. Thompson Avey, MD, Oklahoma City
Ron Elkins, MD, Oklahoma City
Tim Smalley, MD, Stillwater
Ron Kreger, MD, Ponca City
J. Randolph Birch, MD, Tulsa

VII. PRESENTATIONS:

M. Joe Crosthwait, MD, Chairman of the Council on Professional and Public Relations, presented the third OSMA Medical Journalism Award to Mr. Jack Bowen of KOCO-TV. As a part of this award, a \$500 scholarship will be presented to the Department of Radio and TV, School of Journalism, Texas Tech University.

VIII. REMARKS OF THE SPEAKER:

Doctor Kamp introduced the staff of OSMA—Richard Hess, Rick Ernest, Lyle Kelsey and Ed Kelsay. He also introduced Dr Mike Levis, Chairman of AMPAC.

Doctor Leebron introduced Dr Hoyt Gardner, President of the AMA. Doctor Gardner told the delegates that now is a significant time to be a part of a profession with such a positive story to be told. He outlined the role of the AMA and the benefits of membership to physicians and spoke about the future of medicine and medical research in our rapidly shrinking world.

Doctor Mike Levis spoke to the delegates about the AMPAC organization and its contributions.

IX. REPORT OF THE PRESIDENT:

Doctor Leebron presented his report to the Delegates, and it was referred to Reference Committee No. III. (A copy of the report is attached and made a part of these minutes.)

X. REPORT OF THE CHAIRMAN OF THE BOARD:

Doctor Elvin M. Amen read The Report of the Board of Trustees. He then presented a summary of the actions taken by the Board at their meeting earlier in the day. This report was referred to Reference Committee No. III.

XI. SECRETARY-TREASURER'S REPORT:

Armond H. Start, MD, explained the financial report and the audit to the delegates. A dues increase is not recommended for 1981, and he reported that the Association is in good financial condition.

A motion was made to accept Dr Start's report.

The motion was seconded and carried, and the Secretary-Treasurer's Report was referred to Reference Committee No. III.

XII. BUSINESS TO BE BROUGHT BEFORE THE HOUSE:

Doctor Kamp referred the Delegates to their handbooks, which include all information to be considered by the House and referred to reference committees.

A recess was called for the Trustee Districts VI through X to caucus.

After the recess, David Bickham, Executive Director, explained to the Delegates that the doctrine of informed consent had recently been redefined by the Oklahoma State Supreme Court. The requirements to gain informed consent established by the Court pose a significant problem for our newly formed insurance company — PLICO. Mr Bickham asked for permission to introduce for reference committee consideration a proposed uniform informed consent form recommended by legal counsel for OSMA, OHA and OOA.

A motion was made that the House of Delegates accept the proposed informed consent form provided by our legal counsel and that it be referred to Reference Committee No. I. The motion was seconded and passed.

The House of Delegates recessed and went into session as the PLICO shareholder.

Doctor C. Alton Brown, president of PLICO, conducted the annual shareholder meeting of PLICO. He gave some background on the formation of the company and reported that the stockholder's equity now is within a few dollars of \$7 million. The claims situation is favorable, and at this time all evidence points to the fact that the decision to form PLICO was a wise one. Dr Start reported that from an audit standpoint, the condition of PLICO is excellent.

Doctor Brown presented a framed stock certificate representing 1,500,000 shares of stock to Dr Elvin M. Amen, who represented the stockholder of PLICO—OSMA.

XIII. NOMINATIONS FOR ELECTIONS:

Doctor Kamp reconvened the House of Delegates Opening Session, and Doctor Amen declared the House open for nominations for the position of PRESIDENT-ELECT (one-year term of office).

James B. Pitts, Jr., MD, Oklahoma City, was nominated by Marvin Margo, MD, representing Oklahoma County Medical Society. The

nomination was seconded.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of VICE-PRESIDENT (one-year term of office).

John A. McIntyre, MD, Enid, was nominated by *Paul Leap, MD*, representing Garfield County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of SPEAKER, HOUSE OF DELEGATES (two-year term of office).

George Kamp, MD, Tulsa, was nominated by *Michael Haugh, MD*, representing Tulsa County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of VICE-SPEAKER, HOUSE OF DELEGATES (two-year term of office).

Larry Long, MD, Oklahoma City, was nominated by *Ed Rice, MD*, representing Oklahoma County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, (two-year term of office).

Harlan Thomas, MD, Tulsa, was nominated by *John Keown, Jr., MD*, representing Tulsa County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, (two-year term of office).

M. Joe Crosthwait, MD, Midwest City, was nominated by *Ed Rice, MD*, representing Oklahoma County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, (two-year term of office).

Perry Lambird, MD, Oklahoma City, was nominated by *Joseph D. Weedn, MD*, representing Stephens County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE

AMA, (two-year term of office).

William Leebron, MD, Elk City, was nominated by *James B. Eskridge, III, MD*, representing Oklahoma County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of ALTERNATE-DELEGATE TO THE AMA, (two-year term of office).

Orange M. Welborn, MD, Ada, was nominated by *Clarence Taylor, MD*, representing Pontotoc County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA, (two-year term of office).

Victor Robards, MD, Tulsa, was nominated by *David Browning, MD*, representing Tulsa County Medical Society.

There being no other nominations, nominations were declared closed.

Nominations were declared open for TRUSTEE and ALTERNATE TRUSTEE for the following Trustee Districts (three-year term of office):

DISTRICT VI.

Reporting on the caucus of representatives from District VI, the following nominations were made:

Kent Braden, MD, Oklahoma City, and *Kenneth Whittington, MD*, Bethany, were nominated for the positions of Trustee. *The nominations were seconded.*

James Funnell, MD, and *Perry Lambird, MD*, both of Oklahoma City, were nominated for the positions of Alternate Trustee. *The nominations were seconded.*

DISTRICT VII.

Jodie Edge, MD, Norman, was nominated for the position of Trustee. *The nomination was seconded.*

Eldon Gibson, MD, Shawnee, was nominated for the position of Alternate Trustee. *The nomination was seconded.*

DISTRICT VIII.

Richard Liebendorfer, MD, and *Michael Haugh, MD*, both of Tulsa, were nominated for the positions of Trustee. *The nomination was seconded.*

David Lhevine, MD, and *Donald Mauritsen, MD*, both of Tulsa, were nominated for the positions of Alternate Trustee. *The nominations were seconded.*

DISTRICT IX.

Burdge Green, MD, Stilwell, was nominated for the position of Trustee. *The nomination was seconded.*

Wilbur K. Baker, II, MD, Muskogee, was nominated for the position of Alternate Trustee. *The nomination was seconded.*

DISTRICT X.

Robert K. Jackson MD, McAlester, was nominated for the position of Trustee. *The nomination was seconded.*

R. L. Winters, MD, Poteau, was nominated for the position of Alternate Trustee. *The nomination was seconded.*

XIV. ANNOUNCEMENTS:

Doctor Kamp called upon Dr John A. Blaschke, Annual Meeting Chairman, to make announcements. Doctor Blaschke encouraged the delegates to visit the exhibits and thanked the staff for their help in planning the program. He reminded the delegates about the first President's Prayer Breakfast to be held on Saturday morning.

XV. NECROLOGY REPORT:

Doctor Kamp read the Necrology Report. (A copy of the report is attached and made a part of these minutes.)

XVI. ADJOURNMENT OF OPENING SESSION:

The Opening Session of the House of Delegates was adjourned at 3:30 pm.

Recorded by Judy Lake

CLOSING SESSION

I. CALL TO ORDER:

The Closing Session of the 74th Annual Meeting of the House of Delegates was called to order by the Vice-Speaker, George Kamp, MD, at 11:35 am on May 10, 1980, in the Lincoln Plaza Forum, Oklahoma City.

II. INVOCATION:

The invocation was delivered by James D. Funnell, MD.

III. REPORT OF THE CREDENTIALS COMMITTEE:

Ed Calhoon, MD, Chairman, announced that a quorum of delegates was present.

IV. PRESENTATION OF AWARDS:

A. Edward Norfleet, MD, Tulsa, presented an award for Distinguished Service to Mr Jack Spears, Executive Director of the Tulsa County Medical Society. Mr Spears thanked the delegates for this honor.

B. There were two winners of the Outstanding Layman Award this year. These awards were presented by Dr Elvin M. Amen, Chairman of the Board of Trustees, to Mary Kathryn Luton who instituted the Hospitality House in Oklahoma City for families of critically ill patients, and to Mr Stanton Young for outstanding community leadership.

C. Dr William Leebron and Mr Everette Cooke of the A. H. Robins Company presented the A. H. Robins Award for Community Service to Dr Ed Calhoon of Beaver.

V. REPORT OF THE INCOMING PRESIDENT:

Floyd F. Miller, MD, thanked Doctor Leebron for all his help during his year as president-elect, and assured the Delegates that he would do his best to carry out their wishes and follow the policies and decisions made by the House of Delegates.

VI. REPORT OF THE REFERENCE COMMITTEES:

All reports considered by the House of Delegates are attached and made a part of these minutes.

REPORT OF REFERENCE COMMITTEE NO. II:

Presented by Don Rhinehart, MD, Oklahoma City.

Reference Committee No. II approved the following items without amendment.

ITEM I. Report of the Council on Medical Education

ITEM III. Report of *The Journal of the Oklahoma State Medical Association*

ITEM IV. Report of the Council on Public and Mental Health

ITEM V. Special Report on Mobile Drug Abusers: The Reference Committee recommended that the Task Force be authorized to immediately implement this program.

ITEM VI. Report of the Maternal Mortality Committee

ITEM VIII. Report of the Council on Scientific Assembly

ITEM X. Resolution No. 6 — "OSMA Continuing Medical Education Requirement"

Reference Committee No. II approved the following items as amended:

ITEM II. Report of the Council on Professional and Public Relations Page 5, lines 3-4. "Due to changes in the law it was not necessary to use this fund, and since that time it has been held in a *Certificate of Deposit*, and although co-mingled with other Association funds, is earmarked . . ."

ITEM VII. Report of the Perinatal Health Committee: It was recommended that the Perinatal Health Committee be directed to prepare a proposed budget and submit it to the Association's Executive Committee for consideration.

ITEM XI. Resolution No. 7 — "JCAH Ruling on CPR Training" Page 1, delete lines 8 and 9. Page 2, delete lines 3, 4 and 5. Page 2, amend lines 9-12, as follows: "RESOLVED, That the House of Delegates recommends that OSMA members not participate in any formal training session imposed on physicians other than those required by the *Medical Practice Act of the State of Oklahoma*, hospital medical staffs, and by specialty training boards." Add the following resolve: "*and be it further RESOLVED, That the House of Delegates recommend that OSMA members voluntarily seek competency in cardiopulmonary resuscitation.*"

ITEM XII. Resolution No. 13 — "Prescription Monitoring"

Delete lines 6 through 14, replace with "*RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby instructs the Association's President to appoint an Ad Hoc Committee for liaison with the Oklahoma Pharmaceutical Association. Said Committee is to consist of a number of physicians to be established by the Association's President. In addition, the President should seek to have a like number of members appointed to a similar committee by the President of the Oklahoma Pharmaceutical Association. The job of the joint committee will be to resolve conflicts between physicians and pharmacists; and be it further RESOLVED, That the joint committee specifically address the problem of monitoring prescriptions for potentially hazardous drugs such as diuretics, beta blockers, cardiac glycosides, antiarthritic medications, steroids and antibiotics.*"

Reference Committee No. II recommended that the following items not be adopted.

ITEM IX. Resolution No. 5 — "Oklahoma's Emergency Communications System"

ITEM XIII. Late Resolution No. 14 — "Support for Programs for the Mentally Retarded"

A motion was made to adopt a report of Reference Committee No. II as a whole. The motion was seconded and approved.

REPORT OF REFERENCE COMMITTEE NO. III:

Presented by Michael J. Haugh, MD, Tulsa.

Reference Committee No. III approved the following items without amendment:

ITEM I. Report of the Board of Trustees and Supplemental Report of the Board

ITEM II. Report of the President

ITEM III. Report of the Treasurer, Report of the Audit Committee

ITEM IV. Report of the Council on Planning and Development

Reference Committee No. III approved the following items as amended:

ITEM V. Report of the Constitution and Bylaws Committee

Section 1.031, entitled "COMPLETE EXEMPTION" should be amended to delete the reference to students.

Section 2.081, entitled "RIGHTS" should be amended to delete Lines 5-6, beginning with the word "However."

Section 1.034, entitled "SPECIAL EXEMPTIONS" should be amended to insert in Line 10 the word "student" between "as" and "affiliate."

Section 1.05, entitled "OSMA PAST PRESIDENTS" shall be amended by adding the following: "*Provided, however, that the Past-Presidents shall not be included in the quorum list for the delegates.*"

ITEM VII. Resolution No. 10 — "Publication of Medical Laws of Oklahoma, Rules and Regulations of the Oklahoma State Board of Medical Examiners" Amend line 12 to read as follows: *Examiners, in the OSMA Directory and that it be revised bi-annually for distribution to OSMA members;*

ITEM X. Late Resolution No. 15 — "1981 Dues"

It was recommended that the dues for 1981 be set as follows:

Active Members	\$180
Junior Members	\$10
Life Members	—0—
Honorary Members	—0—

In order to comply with the Constitution and Bylaws changes, it is recommended that student members be placed under the classifications which are set by the Board of Trustees.

ITEM XI. Late Resolution No. 16 — "Student Membership Dues"

There was some discussion regarding the changes suggested by the Reference Committee to amend this resolution. A motion was made to accept the report of Reference Committee III. The motion carried, allowing the following changes: Amend line 5 by inserting a period after *Journal of the Oklahoma State Medical Association*, and delete the rest of the sentence. Amend line 8 by changing the word "publications" to "*Journal*." Amend line 12 by placing a period after "student members" and the rest of the sentence be deleted.

Reference Committee No. III recommended that the following items not be adopted.

ITEM VI. Resolution No. 8 "Compulsory American Medical Association Membership"

ITEM VIII. Resolution No. 11 — "Quarterly Payment of OSMA Dues"

ITEM IX. Resolution No. 12 — "Quarterly Payments of Premiums to the Physicians Liability Insurance Company"

A motion was made to adopt the report of Reference Committee No. III as a whole. The motion was seconded and carried.

REPORT OF REFERENCE COMMITTEE NO. I:

Presented by Frank Buster, MD, Cheyenne
Reference Committee No. I approved the following items without amendment:

ITEM II. Report of the Council on Governmental Activities

ITEM V. Report of the Health Planning Advisory Committee

ITEM VI. Report of the State Grievance Committee

ITEM VII. Report of the Physicians' Care Committee

ITEM VIII. Special Report of the Ad Hoc Committee on Independent Nurse Practitioners

ITEM IX. Report of the Oklahoma Foundation for Peer Review, Inc.

ITEM X. Special Report of the OSMA/AMA Jail Project

ITEM XII. Resolution No. 3 — "Reinstatement of AMA Committee on Medical Aspects of Sports"

ITEM XIV. Resolution No. 9 — "Hospital Medical Staff Quality Assurance Activities"

Reference Committee No. I approved the following items as amended:

ITEM I. Report of the Board of Trustees

Page 3, add the following beginning with line 24: "*Further, that the Board of Directors of PLICO is hereby instructed by the House of Delegates to amend its bylaws so that the members of the Board of Directors will serve for three years. This Board of Directors (elected by the House of Delegates in 1980) shall draw lots so that 1/3 of the members will serve for one year, 1/3 shall serve for two years and 1/3 shall serve for three years.*"

The Reference Committee recommended that the House approve the use of the Informed Consent Form with the addition of a date line by all signatures.

ITEM III. Report of the Council on Medical Services

Page 2, line 19, sub-section B of the Addendum Report, strike all language in paragraph B and substitute the following: *The Peer Review Committee of the Oklahoma State Medical Association should continue its activities under new guidelines developed by the Council on Medical Services, and approved by the Board of Trustees. These guidelines should eliminate all cases involving fee determinations.*

A motion was made to amend this amendment by striking the last sentence referring to fee determinations. This motion was approved.

Doctor Braden moved that an informational campaign through the media be conducted in order to inform the Oklahoma public regarding the FTC's decision on peer review. Doctor Braden urged that the matter be turned over to M. Joe Crosthwait, MD, and the OSMA Council on Professional and Public Relations in order to inform the Oklahoma public of the positive contributions made by the Peer Review Committee in past years and the loss which will be felt if the FTC's decision is allowed to stand. The motion was seconded and carried.

ITEM IV. Report of the Council on Members Services

After being apprised of some questions from the members relative to the OSMA sponsored pension plan, the Committee recommends the Council on Members Services request an independent review be taken and

make appropriate recommendations to the Board of Trustees as to the outcome of that review.

ITEM XI. Resolution No. 2 — "Physical Education" The Committee recommends that Resolution No. 2 be referred to the Council on Public and Mental Health for further study and clarification.

ITEM XIII. Resolution No. 4 — "Prevention of Pregnancy Among Adolescents"

Lines 18 and 19, "sexually active" should be changed to "teenagers at risk."

A motion was made to adopt the amended report of Reference Committee No. I as a whole. The motion was seconded and carried.

Doctor Kamp introduced the following Late Resolution No. 17:

Doctor Kamp asked unanimous consent that the rules of the House of Delegates be suspended for the purpose of introducing the following late resolution. There being no objection, the following resolution was read:

"WHEREAS, Samuel Newton Stone, MD, has served faithfully and diligently as Speaker of this House of Delegates for many years; and

WHEREAS, The members of this House as well as all OSMA members are indebted to Doctor Stone for his wise and prudent leadership; and

WHEREAS, Doctor Stone has decided not to seek re-election as Speaker of the OSMA House of Delegates; and

WHEREAS, This House could never adequately repay Doctor Stone but wishes in some way to show its gratitude; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby formally expresses to Doctor Stone its most sincere appreciation and best wishes."

A motion was made that this resolution be adopted by the House. The motion was seconded and unanimously approved.

Doctor Funnell moved that an engraved plaque be prepared and presented to Doctor Stone. The motion was seconded and carried.

VI. ELECTION OF OFFICERS:

The following officers were elected by acclamation:

James B. Pitts, Jr., MD, Oklahoma City, was elected to the office of President-Elect.

John A. McIntyre, MD, Enid, was elected to the office of Vice-President.

George Kamp, MD, Tulsa, was elected to the office of Speaker, House of Delegates.

Larry Long, MD, Oklahoma City, was elected to the office of Vice-Speaker, House of Delegates.

Harlan Thomas, MD, Tulsa, was re-elected to the office of Delegate to the AMA.

M. Joe Crosthwait, MD, Midwest City, was re-elected to the office of Delegate to the AMA.

Perry Lambird, MD, Oklahoma City, was elected to the office of Delegate to the AMA.

William Leebron, MD, Elk City, was elected to the office of Alternate-Delegate to the AMA.

Orange M. Welborn, MD, Ada, was re-elected to the office of Alternate Delegate to the AMA.

Victor Robards, MD, Tulsa, was elected to the office of Alternate Delegate to the AMA.

Trustee District VI: Oklahoma County

Trustees: Kent Braden, MD, Oklahoma City; Kenneth Whittington, MD, Bethany

Alternates: James Funnell, MD, Oklahoma City; Perry Lambird, MD, Oklahoma City

Trustee District VII: Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie & McClain Counties.

Trustee: Jodie Edge, MD, Norman

Alternate: Eldon Gibson, MD, Shawnee

Trustee District VIII: Tulsa County

Trustees: Richard Liebendorfer, MD, Tulsa;

Michael Haugh, MD, Tulsa

Alternates: David Lhevine, MD, Tulsa;

Donald Mauritson, MD, Tulsa

Trustee District IX: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah & Wagoner Counties.

Trustee: Burdge Green, MD, Stilwell

Alternate: Wilbur K. Baker, MD, Muskogee

Trustee District X: Haskell, Hughes, Latimer, LeFlore, Pittsburg & Seminole Counties.

Trustee: Robert K. Jackson, MD, McAlester

Alternate: Richard Winters, MD, Poteau

VII. COMMENTS BY ORANGE WELBORN, MD, CHAIRMAN OF THE OMPAC BOARD OF TRUSTEES

Doctor Welborn spoke briefly to the Delegates about the importance of OMPAC and the work done by this organization, and encouraged everyone to become a member.

VIII. ANNOUNCEMENTS OR NEW BUSINESS

Doctor Braden announced that the annual meeting for 1981 will be held at Shangri La and encouraged the delegates to offer any suggestions for the meeting to the Annual Meeting Planning Committee.

IX. ADJOURNMENT

The 74th Closing Session of the House of Delegates adjourned at 1:30 pm.

(Copies of all reports and resolutions considered by the House of Delegates are available on request.)

Recorded by Judy Lake

REPORT OF REFERENCE COMMITTEE NO. I

Presented by: Frank Buster, MD, Cheyenne
Mr. Speaker and Members of the House of Delegates, Reference Committee No. I has carefully considered the items which were referred to it and submits the following report:

ITEM I.

Report of the BOARD OF TRUSTEES

Report A outlines a recommended procedure for the future election of PLICO Board members. The report recommends that the PLICO Board, as approved by the Board of Trustees, be confirmed by the House of Delegates. Other reports before the House enumerate the many accomplishments of PLICO and the Reference Committee is in complete accord with the Board of Trustees that the existing Board of Directors of PLICO should be confirmed. However, your Reference Committee notes that the procedure recommended by the Board does not provide for staggered terms for PLICO Board members and testimony before the Committee confirmed that staggered tenures for Board members would be in the best interest of PLICO and the Association. We, therefore, recommend that Report A of the Board of Trustees be amended by adding on Page 3 beginning on Line 24, as follows:

"Further, that the Board of Directors of PLICO is hereby instructed by the House of Delegates to amend its bylaws so that the members of the Board of Directors will serve for three years. This Board of Directors (elected by the House of Delegates in 1980) shall draw lots so that 1/3 of the members will serve for one year, 1/3 shall serve for two years and 1/3 shall serve for three years."

This amendment will improve the management of PLICO and provide for continuity of expertise on its board.

Mr. Speaker, we recommend the adoption of Report A of the Board of Trustees as amended.

Mr. Speaker, I move for adoption of this portion of this report.

Mr. Speaker, your Reference Committee discussed the Informed Consent Form and recommends the addition of a date line by all signatures. *Mr. Speaker, with this one amendment, your Reference Committee recommends the House approve the use of this form.*

Mr. Speaker, I move adoption of this portion of the Report.

ITEM II.

Report of the COUNCIL ON GOVERNMENTAL ACTIVITIES

Mr. Speaker, Reference Committee No. I extends its gratitude to Doctor Perry Lambird and the other members of this council for their superb involvement and success with the Oklahoma State Medical Association legislative program. The Reference Committee also recommends the House continue to emphasize that all members of OSMA become 200 Club members.

Mr. Speaker, I move the Report of the Council on Governmental Activities be accepted.

Mr. Speaker, I move adoption of this portion of the report.

ITEM III.

Report of the COUNCIL ON MEDICAL SERVICES

Mr. Speaker, this Reference Committee heard considerable discussion on the various portions of this report, including the addendum report of the Peer Review Committee, and recommends the following amendment:

On Page 2, Line 19, sub-section B of the Addendum Report, strike all language in paragraph B. Your Reference Committee presents the following amendment:

The Peer Review Committee of the Oklahoma State Medical Association should continue its activities under new guidelines developed by the Council on Medical Services, and approved by the Board of Trustees. These guidelines should eliminate all cases involving fee determinations.

Mr. Speaker, I move adoption of the report of the Council on Medical Services as amended.

Mr. Speaker, I move adoption of this portion of the report.

ITEM IV.

Report of the COUNCIL ON MEMBERS SERVICES

Mr. Speaker, your Reference Committee was made aware of the dedication of this Council to

the successes of the many programs sponsored by OSMA. The Committee extends its appreciation to the chairman and the members of this council for their diligent service.

After being apprised of some questions from the members relative to the OSMA sponsored pension plan, the Committee recommends the Council on Members Services request an independent review be taken and make appropriate recommendations to the Board of Trustees as to the outcome of that review.

Mr. Speaker, I move adoption of the Report of the Council on Members Services as amended.

I move the adoption of this portion of the Report.

ITEM V.

Report of the
HEALTH PLANNING
ADVISORY COMMITTEE

Your Reference Committee recommends adoption of this report.

Mr. Speaker, I move adoption of this portion of the report.

ITEM VI.

Report of the
STATE GRIEVANCE COMMITTEE

Mr. Speaker, your Reference Committee accepts this report for information and expresses its appreciation to the members of this committee for their involvement on a very difficult committee.

I move the approval of this Committee Report.

Mr. Speaker, I move for the adoption of this portion of the report.

ITEM VII.

Report of the
PHYSICIANS' CARE COMMITTEE

Mr. Speaker, your Reference Committee accepts this report for information and is aware of the hours of dedication by the members of this committee.

Your Reference Committee moves the approval of this committee report.

Mr. Speaker, I move for adoption of this portion of this report.

ITEM VIII.

Special Report of the
AD HOC COMMITTEE ON
INDEPENDENT NURSE PRACTITIONERS

Mr. Speaker, your Reference Committee accepts this report for information and would strongly recommend the continuation of this OSMA/ONA Liaison Committee.

The Reference Committee moves approval of this report.

Mr. Speaker, I move for adoption of this portion of the report.

ITEM IX.

Report of the
OKLAHOMA FOUNDATION FOR
PEER REVIEW, INC.

Mr. Speaker, Doctor John McIntyre gave a very in-depth explanation of this report and we recommend congratulating the Board of the OFPR.

Mr. Speaker, I move for adoption of this report.

Mr. Speaker, I move for the adoption of this portion of the report.

ITEM X.

Special Report of the
OSMA-AMA JAIL PROJECT

Mr. Speaker, your Reference Committee has read and discussed the special report of the OSMA-AMA Jail Project. The Committee recommends that this report be accepted as information only.

I move for the adoption of this report.

Mr. Speaker, I move for adoption of this portion of the report.

ITEM XI.

RESOLUTION No. 2

Mr. Speaker, your Reference Committee heard testimony on Resolution No. 2 and it is the consensus of opinion of your Reference Committee that this resolution be studied further and clarified. The Committee recommends that Resolution No. 2 be referred to the Council on Public and Mental Health for further study and clarification.

Your Reference Committee moves the acceptance of this report.

Mr. Speaker, I move for adoption of this portion of the report.

ITEM XII.

RESOLUTION No. 3

Mr. Speaker, your Reference Committee reviewed Resolution No. 3 and recommends that it be approved.

I move acceptance of this report.

Mr. Speaker, I move for adoption of this portion of the report.

ITEM XIII.

RESOLUTION No. 4

Mr. Speaker, your Reference Committee recommends that changes be made in the wording in lines 18 and 19 in Resolution No. 4.

"Sexually active" should be changed to "teenagers at risk."

The Committee endorses this resolution in light of the information provided by the Central Oklahoma Pediatric Society and wishes this information to be part of this report.

I move for adoption of this resolution.

Mr. Speaker, I move for adoption of this portion of the report.

ITEM XIV.

RESOLUTION No. 9

Mr. Speaker, your Reference Committee considered Resolution No. 9 and recommends that it be approved.

Mr. Speaker, I move for adoption of this portion of this report.

Mr. Speaker, your Reference Committee moves adoption of this report as a whole.

Mr. Speaker, as Chairman of this Reference Committee, I would like to thank the committee members and the staff for their cooperation and work on this committee report.

Frank Buster, MD, Chairman

Joe Stafford, MD

Irwin Brown, MD

David Rose, MD

Layton Runkle, MD

James Wise, MD

Joseph Salamy, MD

Lyle Kelsey, Staff

Ed Kelsay, Staff

Cheryl Coy, Staff

**REPORT OF
REFERENCE COMMITTEE NO. II**

Presented by: Don Rhinehart, MD, Oklahoma City

Mr. Speaker and Members of the House of Delegates, Reference Committee No. II has carefully considered the items which were referred to it and submits the following report:

ITEM I.

Report of the
COUNCIL ON MEDICAL EDUCATION

Mr. Speaker, your Reference Committee

closely examined the Report of the Council on Medical Education and recommends that it be approved.

Mr. Speaker, I move adoption of this portion of the report.

ITEM II.

Report of the
COUNCIL ON PROFESSIONAL AND
PUBLIC RELATIONS

Mr. Speaker, your Reference Committee carefully examined the Report of the Council on Professional and Public Relations and wishes to commend the Council for its programs.

The Committee does recommend that the Council report be amended beginning on lines 3-6 on page 5 to read as follows: "Due to changes in the law it was necessary to use this fund, and since that time it has been held in a *Certificate of Deposit*, and although co-mingled with other Association funds, is earmarked to be used in a public relations/advertising program against passage of National Health Insurance." Mr. Speaker, this amendment is an informational correction only.

Mr. Speaker, I move adoption of this report as amended.

ITEM III.

Report of the
*JOURNAL OF THE OKLAHOMA
STATE MEDICAL ASSOCIATION*

Mr. Speaker, your Reference Committee closely examined the Report of *The Journal* and wishes to commend it upon its activities. Your Committee wishes to make special note of the loss suffered by *The Journal* and our profession in general, upon the death of Ernest Lachman, MD.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM IV.

Report of the
COUNCIL ON PUBLIC AND
MENTAL HEALTH

Mr. Speaker, your Reference Committee closely examined the Report of the Council on Public and Mental Health and wishes to commend it for its various activities. Some of the items discussed in the report are also the subject of separate resolutions and will be specifically addressed when we reach that portion of this report.

The Reference Committee recommends that the Report of the Council on Public and Mental Health be approved.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM V.

Special report on
MOBILE DRUG ABUSERS

Mr. Speaker, your Reference Committee considered the Special Report on Mobile Drug Abusers that was submitted by the Council on Public and Mental Health. The Committee wishes to commend the Task Force on Mobile Drug Abusers for the program that it outlines in this report and recommends that this program be implemented by the Association.

Mr. Speaker, it is the Reference Committee's recommendation that the Task Force be authorized to immediately implement its program.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM VI.

Report of the
MATERNAL MORTALITY COMMITTEE

Mr. Speaker, your Reference Committee considered the Report of the Maternal Mortality Committee and recommends that the report be approved.

Mr. Speaker, I move adoption of this portion of the report.

ITEM VII.

Report of the
PERINATAL HEALTH COMMITTEE

Mr. Speaker, your Reference Committee considered the Special Report received from the Association's Committee on Perinatal Health. This report was received late and was not made available to all members of the House of Delegates as a part of their handbooks. Copies of the report have now been made available to the delegates.

After your Committee considered the report, it is its recommendation that the Perinatal Health Committee be directed to prepare a proposed budget and submit it to the Association's Executive Committee for consideration.

Your Reference Committee commends the Committee for its work this year.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM VIII.

Report of the
COUNCIL ON SCIENTIFIC ASSEMBLY

Mr. Speaker, Reference Committee No. II carefully considered the Report of the Council on Scientific Assembly and recommends the report be adopted.

Mr. Speaker, I move adoption of this portion of the report.

ITEM IX.

RESOLUTION NO. 5—OKLAHOMA'S
EMERGENCY
COMMUNICATIONS SYSTEM

Mr. Speaker, your Reference Committee received a great deal of testimony in regard to this resolution. However, we must point out that the cost of such a system is apparently unknown at this time. Therefore, it is the recommendation of the Committee that this Association not take a position on this activity until a more detailed fiscal note can be arranged.

Mr. Speaker, it is your Committee's recommendation that this resolution not be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM X.

RESOLUTION NO. 6
OSMA CONTINUING MEDICAL
EDUCATION REQUIREMENT

Mr. Speaker, your Reference Committee received a great deal of testimony in regard to the Association's current CME requirement. While it is clear that a physician can never complete his education, the placing of an absolute, fixed number of CME hours does not appear to be a viable mechanism for education. Therefore, while your Committee feels very strongly that continuing medical education is important to the practice of medicine, it is the Committee's recommendation that the CME requirement be dropped. Your Committee recommends that Resolution No. 6 be adopted. The adoption of this resolution will eliminate the Association's requirement that its physician members acquire the AMA's Physician Recognition Award.

Your Committee wishes to make clear to the members of the House that the adoption of this resolution removes the CME requirement for continued OSMA membership.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM XI.

RESOLUTION NO. 7

JCAH RULING ON CPR TRAINING

Mr. Speaker, while your Reference Committee is in sympathy with the intent of Resolution No. 7 regarding the Joint Commission on Accreditation of Hospitals' requirement regarding CPR, your Committee does wish to amend the resolution to remove language that it feels is unnecessary to carry out the resolution's intent.

Therefore, your Committee wishes to remove lines 8 and 9 on the first page of the resolution and lines 3, 4 and 5 on page 2. In addition, your Committee wishes to amend the last Resolve beginning on page 2 at line 9 to read as follows: "RESOLVED, That the House of Delegates recommends that OSMA members not participate in any formal training session *imposed* on physicians other than those required by the *Medical Practice Act of the State of Oklahoma*, hospital medical staffs, and by specialty training boards."

Mr. Speaker, your Committee wishes to make it clear that it is not opposed to CPR training for physicians. Therefore, it recommends that the following resolve be added to Resolution No. 7: "and be it further

RESOLVED, That the House of Delegates recommend that OSMA members voluntarily seek competency in cardiopulmonary resuscitation."

Your Committee recommends the approval of Resolution No. 7 as amended.

Mr. Speaker, I move adoption of this portion of the report.

ITEM XII.

RESOLUTION NO. 13

PRESCRIPTION MONITORING

Mr. Speaker, your Committee received a great deal of testimony in regard to difficulties between physicians and pharmacists. The testimony was not limited just to comments on the essence of Resolution 13. Your Committee feels that there should be created an Ad Hoc Committee for formal liaison between the Pharmacy Association and the OSMA. Therefore, your Committee wishes to recommend Resolution 13 be amended by deleting the two resolves beginning on lines 6 and 12 and replacing them with the following language: "RESOLVED, That the House of Delegates of

the Oklahoma State Medical Association hereby instructs the Association's President to appoint an Ad Hoc Committee for liaison with the Oklahoma Pharmaceutical Association. Said Committee is to consist of a number of physicians to be established by the Association's President. In addition, the President should seek to have a like number of members appointed to a similar committee by the President of the Oklahoma Pharmaceutical Association. The job of the joint committee will be to resolve conflicts between physicians and pharmacists; and be it further

RESOLVED, That the joint committee specifically address the problem of monitoring prescriptions for potentially hazardous drugs such as diuretics, beta blockers, cardiac glycosides, antiarthritic medications, steroids and antibiotics.

Your Reference Committee recommends that Resolution No. 13 be adopted as amended.

Mr. Speaker, I move adoption of this portion of the report.

ITEM XIII.

LATE RESOLUTION NO. 14

SUPPORT FOR PROGRAMS FOR THE MENTALLY RETARDED

Mr. Speaker, while your Committee is sympathetic and supportive of such activities as outlined in this resolution . . . the creation of a special residential facility for the mentally retarded, it does not feel that such activities should be specifically endorsed by the Association. The information contained in this resolution is of interest to Association members, and it should be received for that purpose.

Mr. Speaker, your Committee recommends that Late Resolution No. 14 not be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

Mr. Speaker, I move the adoption of this report as a whole.

Mr. Speaker, as Chairman of this Reference Committee, I would like to thank the Committee members and the staff for their cooperation and their work on this Committee report.

Don Rhinehart, MD, Chairman

Ralph Buller, MD

Ray Cornelison, MD

Theodore Fortmann, MD

A. C. Roberson, MD

Bruce Stoesser, MD

Boyd O. Whitlock, MD

Richard L. Hess, Staff

Judy Lake, Staff

REPORT OF REFERENCE COMMITTEE NO. III

Presented by: Michael J. Haugh, MD, Tulsa
Mr. Speaker and Members of the House of
Delegates:

Reference Committee No. III has carefully
considered the items which were referred to it
and submit the following report:

ITEM I.

Report of the BOARD OF TRUSTEES AND SUPPLEMENTAL REPORT OF THE BOARD

Mr. Speaker, your Reference Committee
carefully reviewed the actions of the Board of
Trustees. It recognizes the many hours of de-
liberations these elected physicians served to
conduct the business of the Association.

The Reference Committee agrees with the
Board of Trustees in opting to hold the 1981
Annual Meeting at Shangri-La; however, if
negotiations cannot be worked out suitably, it
is recommended that the meeting be held in
Oklahoma City.

The Reference Committee would also like to
follow the Board's lead in expressing its sorrow
in the loss of Charlotte Leebron, the wife of
President William M. Leebron, MD.

It was brought to the Committee's attention
that Doctor William C. Ewell, Tulsa County,
was inadvertently left off of the list of physi-
cians awarded Life Memberships on February
10, 1980. It is recommended that his name be
added to the report. Your Reference Committee
recommends approval of the report as
amended.

*Mr. Speaker, I move adoption of this portion
of the report.*

ITEM II.

Report of the PRESIDENT

Mr. Speaker, your Reference Committee is
aware of the diligent effort by Doctor Leebron
during his tenure as President of the Okla-
homa State Medical Association. He has
brought significant expertise and strong lead-
ership to the Association, and the Reference
Committee recommends that profound ap-
preciation of the entire State Medical Associa-
tion be extended to Doctor Leebron for his ser-

vice to Oklahoma medicine. The Reference
Committee recommends distribution of this
report and that it be filed.

*Mr. Speaker, I move the adoption of this por-
tion of the report.*

ITEM III.

Report of the TREASURER—REPORT OF THE AUDIT COMMITTEE

Mr. Speaker, since the report of the
Secretary-Treasurer and the report of the
Budget and Audit Committee both deal with
OSMA fiscal affairs, your Reference Commit-
tee considered these reports together. We re-
commend the approval of this report.

*Mr. Speaker, I move the adoption of this por-
tion of the report.*

ITEM IV.

Report of the COUNCIL ON PLANNING AND DEVELOPMENT

Mr. Speaker, the Reference Committee
would like to commend the Council on Plan-
ning and Development and call to the attention
of the House the fine job that the Council has
done under the leadership of Doctor Marvin K.
Margo. It was brought to the attention of the
Committee that there were several typo-
graphical errors in the budgetary portion of the
report, and these were corrected. Inasmuch as
the Reference Committee and House of Dele-
gates considered each council report individu-
ally, and since the Council on Planning and
Development report is a summary of all of the
councils' reports, we recommend the report
from the Council on Planning and Develop-
ment be filed as amended.

*Mr. Speaker, I move adoption of this portion
of the report.*

ITEM V.

Report of the CONSTITUTION AND BYLAWS COMMITTEE

Mr. Speaker, the Reference Committee con-
sidered the report of the Constitution and By-
laws Committee as a whole because the major-
ity of the amendments are housekeeping and
did not receive controversial comment. How-
ever, to accomplish the objectives of the Board
of Trustees, Members of the Reference Com-

mittee, and others who testified before the Committee, in regard to membership services for students, the Reference Committee has amended the report as follows:

Section 1.031, entitled "COMPLETE EXEMPTION" should be amended to delete the reference to students.

Section 2.081, entitled "RIGHTS" should be amended to delete Lines 5-6, beginning with the word "However."

Section 1.034, entitled "SPECIAL EXEMPTIONS" should be amended to insert in Line 10 the word "student" between "as" and "affiliate."

Section 1.05, entitled "OSMA PAST PRESIDENTS" shall be amended by adding the following: *"Provided, however, that the Past Presidents shall not be included in the quorum list for the delegates."* Your Reference Committee recommends that the report of the Constitution and Bylaws Committee be approved as amended.

Mr. Speaker, I move adoption of this portion of the report.

ITEM VI.

RESOLUTION NO. 8

Mr. Speaker, the Reference Committee heard much debate both pro and con concerning the compulsory American Medical Association membership. The Committee was informed of the adverse situations which would occur if compulsory membership in the American Medical Association were withdrawn, such as loss of membership in the OSMA, loss of the newly acquired fourth delegate to the AMA, and the ill effects this would have on the newly formed Physicians Liability Insurance Company. Your Reference Committee unanimously recommends that Resolution No. 8 be rejected.

Mr. Speaker, I move adoption of this portion of the report.

ITEM VII.

RESOLUTION NO. 10

Mr. Speaker, your Reference Committee considered the testimony and recommends that Resolution No. 10 be amended to provide that the first resolve in Resolution No. 10 be amended to read as follows: "RESOLVED, That the Oklahoma State Medical Association publish as soon as possible an updated compendium of Oklahoma medical laws, including rules and regulations of the Oklahoma State

Board of Medical Examiners, in the OSMA Directory and that it be revised bi-annually for distribution to OSMA members;" Mr. Speaker, your Reference Committee recommends the approval of Resolution No. 10 as amended.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM VIII.

RESOLUTION NO. 11

Mr. Speaker, your Reference Committee considered Resolution No. 11 and recommends that it be rejected.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM IX.

RESOLUTION NO. 12

Mr. Speaker, your Reference Committee considered Resolution No. 12 and recommends that it be rejected.

Mr. Speaker, I move the adoption of this portion of the report.

ITEM X.

LATE RESOLUTION NO. 15

Mr. Speaker, your Reference Committee considered Late Resolution No. 15 and recommends that the dues for 1981 be set as follows:

Active Members	\$180
Junior Members	\$ 10
Life Members	—0—
Honorary Members	—0—

and that in order to comply with the Constitution and Bylaws changes, it is recommended that student members be placed under the classifications which are set by the Board of Trustees. Your Reference Committee recommends that Late Resolution No. 15 be approved as amended.

Mr. Speaker, I move adoption of this portion of the report.

ITEM XI.

LATE RESOLUTION NO. 16

Mr. Speaker, your Reference Committee considered Late Resolution No. 16 and proposes the following changes:

Line 5 be amended by inserting a period after "JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION" and deleting the rest of that sentence.

Line 8 be amended by changing the word "publications" to "JOURNAL."

Line 12 be amended by placing a period after "student members" and the rest of the sentence be deleted. Your Reference Committee recommends that Late Resolution No. 16 be approved as amended.

Mr. Speaker, I move the adoption of this portion of the report.

Mr. Speaker, as Chairman of this Reference Committee, I would like to thank the Committee members and the staff for their cooperation and work on this report.

Michael J. Haugh, MD, Chairman

Joseph Krueger, MD

H. Thompson Avey, MD

Ron Elkins, MD

Tim Smalley, MD

Ron Kreger, MD

J. Randolph Birch, MD

Rick Ernest, Staff

Jeanette Saunders, Staff

Mary Melot, Staff

Report of the
BOARD OF TRUSTEES
(APPROVED AS AMENDED)

Report: A

Subject: PLICO Board of Directors

Submitted by: OSMA Board of Trustees

Referred to: Reference Committee I

The House of Delegates at its Annual Meeting in 1979 approved Resolution No. 2, which authorized the Board of Trustees to organize and form an insurance company. The first Resolve of the Resolution states:

"Resolved, that the House of Delegates of the Oklahoma State Medical Association hereby empowers the members of the Board of Trustees of the Oklahoma State Medical Association to organize and form an insurance company owned by the OSMA for the purpose of writing professional liability and related lines of insurance on Oklahoma physicians; . . ."

The Board, acting on the authority granted by the House, took the necessary steps to form the company on November 11. A Board of Directors was appointed and properly seated by the OSMA Board of Trustees acting as the shareholder.

The Bylaws of PLICO (Article III, Section 2) state:

"*Election.* Members of the initial Board of Directors shall be elected at the first meeting of the shareholder and shall hold office for one year or until their successors have been elected and qualified. Therefore, the Board of Directors shall be elected by the House of Delegates to the Oklahoma State Medical Association at its Annual Meeting, at which time the Association's Board of Trustees shall submit a slate of nominees based in whole or in part on recommendations received from the Board of Directors of the Corporation."

The PLICO Bylaws say that the Board shall ". . . hold office for one year . . ." after they have been elected by the shareholder. The original PLICO Board took office on November 11, 1979, and theoretically they should hold office until November 11, 1980. That date, of course, does not coincide with the Annual Meeting of the House of Delegates. Since the PLICO Bylaws also provide that directors will hold office for one year ". . . or until their successors have been elected and qualified," there would be no contraindication for Board members serving the extended period.

Since the PLICO Board was properly appointed and has not served a full year, and since the Board has done an excellent job in organizing and managing the company thus far, it is the recommendation of the Board of Trustees that the House affirm the appointments and not hold elections in 1980. Further, the Board recommends to the House that the following nomination procedure be adopted for filling positions on the PLICO Board each year. The Council on Members Services has recommended to the PLICO Board of Directors that directors serve staggered terms of three years each. It is anticipated that the suggestion will be incorporated into PLICO's Bylaws. Thus, the House would elect five PLICO directors each year. The recommended nomination process is as follows:

"The President of the Association shall, at least three months prior to the Annual Meeting of the House of Delegates, solicit nominees for the PLICO Board from presidents of county medical societies, members of the Board of Trustees, and the members of the Council on Members Services. The nominees shall be qualified by a committee of the Board of Trustees appointed by the Chairman and shall in-

clude the President of the PLICO Board of Directors. Nominees selected to serve on the Board of PLICO shall be submitted to the OSMA Board for approval and recommendation to the House of Delegates at its Annual Meeting. Any member of the House shall be entitled to nominate from the floor. In the event there are more nominees than positions, the House shall vote until 5 members have been elected by majority vote."

"Further, that the Board of Directors of PLICO is hereby instructed by the House of Delegates to amend its bylaws so that the members of the Board of Directors will serve for three years. This Board of Directors (elected by the House of Delegates in 1980) shall draw lots so that 1/3 of the members will serve for one year, 1/3 shall serve for two years and 1/3 shall serve for three years."

OFFICERS AND DIRECTORS OF PLICO

- 1. C. Alton Brown, MD, President, Oklahoma City
- 2. David Bickham, Vice-President, Edmond
- 3. Armond H. Start, MD, Secretary-Treasurer, Oklahoma City
- 4. Ed L. Calhoon, MD, Beaver
- 5. James B. Eskridge, III, MD, Oklahoma City
- 6. Eugene G. Field, MD, Tulsa
- 7. Billy R. Goetzinger, MD, Oklahoma City
- 8. Wm. M. Leebron, MD, Elk City
- 9. C. S. Lewis, Jr., MD, Tulsa
- 10. Marvin L. Margo, MD, Oklahoma City
- 11. Floyd F. Miller, MD, Tulsa
- 12. John A. McIntyre, MD, Enid
- 13. Ray V. McIntyre, MD, Kingfisher
- 14. Edward K. Norfleet, MD, Tulsa
- 15. Vacant

CONSENT FOR SURGICAL, MEDICAL OR
DIAGNOSTIC PROCEDURES AND
ACKNOWLEDGEMENT OF
RECEIPT OF INFORMATION
(APPROVED AS AMENDED)

PATIENT _____
PATIENT # _____
DATE _____ TIME _____

The hospital and your physician are required to obtain your consent to perform the surgical, medical or diagnostic procedure(s) listed below. Signing this form will acknowledge that you agree with and consent to your physician per-

forming the recommended procedure(s). Your signature also confirms that your physician has explained fully to you, the procedure(s), alternative methods of treatment, and all risks material to your decision to undergo the procedure(s). Please read this entire form carefully and then before signing it ask any questions you may have, as your consent is valid until you withdraw it in writing.

1. I hereby authorize _____
with associate and/or assistant of his/her
choice to perform upon _____

Patient's name
the following surgical, medical or diagnostic
procedure(s) _____

_____ to include any necessary anesthesia and disposal of tissue removed during surgery. I further authorize my physician and his assistant(s) to perform any other procedure that in their judgment is advisable for my well being. This additional authority is extended as I recognize that during the above listed procedure(s), unforeseen conditions may require different or additional procedures.

2. I have been informed that there are risks associated with any surgical procedure and understand these risks to include severe loss of blood, infection and cardiac arrest that could lead to temporary or permanent disability or death. My physician has also informed me of any other material risks associated with the above listed procedure(s).

3. I am aware that the practice of medicine and surgery is not an exact science and acknowledge that no guarantees or warranties have been made to me concerning the results of the procedure(s).

4. I HEREBY STATE THAT I HAVE READ AND UNDERSTAND THIS CONSENT AND THAT ALL MY QUESTIONS ABOUT THE PROCEDURE(S) HAVE BEEN ANSWERED IN LANGUAGE THAT I UNDERSTAND AND THAT ALL BLANKS WERE FILLED IN PRIOR TO MY SIGNATURE.

Date _____
Signature of Patient _____
date _____
Signature of Guardian _____
date _____
Signature of Relative _____
Witness _____
Date _____

I certify that all blanks in this form were filled in prior to signature and I explained them to the patient or his representative or guardian before their signature.

Signature of Physician

Date

APPROVED BY:

Oklahoma State Medical Association
Oklahoma Osteopathic Association
Oklahoma Hospital Association

Report of the
COUNCIL ON
GOVERNMENTAL ACTIVITIES
(APPROVED)

INTRODUCTION:

The Council is responsible for state and national legislative and regulatory activities of OSMA. It functions with a State Legislative Committee that reviews and takes positions on items of interest introduced in the State Legislature and within state agencies. The Council itself reviews and attempts to influence national issues. Both the Council and the Committee utilize a "key man" program to make contact with state and national lawmakers. The State Legislative Committee has an OSMA staff person assigned almost full time to assist in carrying out its duties, and the Council has a part-time employee domiciled in Washington to assist in our national efforts.

ACTIVITIES:

State Legislature:

Since the first of the year, the OSMA Legislative Committee has met four times and considered twenty-six pieces of legislation. A great deal of time was expended on nursing legislation involving the practice of nurse midwifery and defining Nurse Practitioners. There were ten legislative bills that would affect various areas of mental health with one bill in particular attempting to recodify the Mental Health Code.

Another area of major concern to the Association was legislation dealing with health planning and certificate of need. Space in this report does not allow for a detailed description and status of each bill; however, a legislative newsletter will be made available to the OSMA membership.

In other legislative activities, the first aid

station at the State Capitol continues to be a viable and important part of the Medical Association's involvement in the Legislature. The location of the first aid station has been moved to a larger room and has proven to be a better equipped facility.

In an effort to improve the emergency medical care for not only the Legislature but also the Capitol Complex employees, OSMA staff met with representatives of AMCARE and the State Board of Affairs to discuss the possibility of securing an ambulance on the Capitol grounds. A permanent location has been selected for the ambulance at the south end of the Capitol.

The annual OSMA Auxiliary "Day at the Legislature" was held on Thursday, February 28, 1980. Approximately 100 women from across the state attended the program covering topics on Estate and Inheritance Tax Laws; Legislative Issues on Education; New Programs Involving Displaced Homemakers; and Foster Care. Joan Leavitt, MD, spoke to the group during their luncheon.

National Issues:

OSMA became heavily involved in the congressional debate on the Administration's Hospital Cost Containment Bill, which was almost universally disliked by hospital and medical organizations. In an early poll of the Oklahoma House members, it was estimated that three and perhaps four of the six members would likely vote *for* the bill. The Council conducted a concerted campaign of letter-writing, telegrams, phone calls, and personal visits that ultimately resulted in a 6-0 vote *against* the bill. The Council feels that the fact that we had a man physically present in Washington contributed significantly to the successful campaign. We have been influential in a number of other areas, particularly in modifying the Laboratory Improvement Act, challenging certain sections of the Medicare-Medicaid Reform Act and monitoring the current debate on catastrophic health insurance. The current vogue in Washington as far as health legislation is concerned is "Incentives for Competition" in the health industry. There are a number of different bills with varying ideas, but the basic thrust is to require that employers, as a condition for tax deduction, offer to his employees a number of health insurance options with a full range of benefits. The employee thus makes the decision whether his coverage will be minimal or comprehensive and reaps the economic reward or loss as a re-

sult of his decision. This is a new philosophy in health care financing, and it is difficult to determine the outcome of their approach. The AMA has taken a very cautious approach. The Council sees this as a major legislative issue and will continue to watch these bills carefully.

OSMA representatives have made two trips to Washington to discuss national issues with the congressional delegation, and have maintained an ongoing dialogue through staff, letters, and phone calls.

The Council made one special appeal to the key men asking that comments on adverse federal regulations be registered with the congressmen. The response was very good, and a large volume of mail resulted.

The Council feels very strongly that the Washington activities of OSMA are having an impact on national health policy. We are confident that if other state associations conducted similar programs, medicine's lot would be much more predictable in Washington. Unfortunately, the AMA leadership considers the OSMA effort a compromising one even though we have taken only one position contrary to the AMA (HR 2222 — which would have permitted house staff to unionize). The Council will attempt to more clearly define for the AMA Board the logic of the OSMA program and will solicit their approval and support.

RECOMMENDATIONS:

The Council asks permission to continue its programs and specifically asks for House endorsement of the following set of objectives which are to be accomplished by 1986:

1. Secure the adoption by four state medical associations in other jurisdictions of a national legislative/regulatory program similar to that of the Oklahoma State Medical Association's;
2. Change AMA policy to encourage state medical associations to participate directly in national legislative/regulatory activities;
3. Each year, invite the president-elect and chief executive officer of one target state medical association to accompany OSMA officials on one Washington legislative communication trip;
4. Each year, three OSMA officials will attend a meeting of the Board of Trustees or comparable unit in the target state medical association to explain the OSMA program;
5. At each AMA meeting, publicize the

intent and accomplishments of the OSMA programs;

6. Introduce in the AMA House of Delegates: (a) a resolution requesting the formation of a specific section in the AMA Washington office to be responsible for coordination and communication between the AMA and state and other national medical organizations which maintain Washington offices; and (b) other resolutions which may be required to implement OSMA objectives.

BUDGET REQUEST:

Washington Program	\$8,200.00
State Legislative Program	2,500.00
Council Objectives	5,300.00
Total	\$15,000.00

Respectfully submitted,

Perry A. Lambird, MD, Chairman
 George H. Kamp, MD
 George H. Pikler, MD
 Kenneth Whittington, MD
 William E. Dieker, MD
 Jerome M. Dilling, Jr., MD
 Robert S. Ellis, MD
 Mrs. J. B. Eskridge, III
 John T. Forsythe, MD
 T. G. Hodge, MD
 Joe C. Horton, MD
 William L. Hughes, MD
 Leroy M. Milton, MD
 C. Scott Williams, MD
 Lanny F. Trotter, MD
 Orange M. Welborn, MD
 Ronald H. White, MD

Report of the
 COUNCIL ON MEDICAL SERVICES
 (APPROVED AS AMENDED)

INTRODUCTION:

The Council has been charged with the duties of studying, making decisions and formulating activities with respect to the provisions of adequate medical care, including but not limited to the design or evaluation of all types of health care delivery systems, health planning, the financing of medical services, and its impact on the quality of patient care, the social aspects of health, internal peer review mechanisms and the appraisal of all external programs which affect the cost or quality of medical care.

REVIEW OF ACTIVITIES:

A. *Health Planning* — The health planning duties of the Council are becoming greater and greater. Trying to stay abreast of the activities of the state's major health planning agencies, *ie*, Oklahoma Health Systems Agency, Oklahoma Health Coordinating Council, and the Oklahoma Health Planning Commission is fast becoming a full-time job. At this time both the HSA and HPC have completed health plans for Oklahoma. Both organizations have agreed upon and identified six priority areas; health education, health promotion, emergency medical services, primary care, mental health, and disease detection. A good example of the type of goals within these priorities, which will have far-reaching effects on the individual practitioner, is their goal of creating a health maintenance organization in Oklahoma within the next few years. At the present time much deliberation is taking place on the actual meshing together of the two individual plans in order to come up with one state health plan. The work that goes into these plans is far-reaching and many people from different walks of life are touched. Most closely to home are the physicians who serve on the many councils, committees, and boards of the health planning agencies. Presently, there are 21 physicians serving on the various agencies, and they provide many hours of their professional and personal time in these jobs. Because of the importance the Council on Medical Services has placed on health planning the OSMA Board of Trustees has created a special committee, the Health Planning Advisory Committee. This committee will be made up primarily of the aforementioned 21 physicians, will have as its priorities to monitor and liaison with the health planning organizations, to keep the membership informed on health planning through a newsletter system and identify other physicians who will serve on these health planning agencies. The most significant suggestion of this committee has been the hiring or creation within the existing staff of a full-time health planner position. This suggestion was taken before the OSMA Board of Trustees, who recommended that some alternatives be explored.

B. *Peer Review* — The Peer Review Committee of the Oklahoma State Medical Association should continue its activities under new guidelines developed by the Council on Medical Ser-

vices, and approved by the Board of Trustees.

C. *Ad Hoc Committee on Independent Practitioners* — Last year we reported on the appointment of this committee headed by C. S. Lewis, Jr., MD, and its interest in meeting with the Nursing Association. The committee, the Oklahoma State Medical Association/Oklahoma Nurses Association Liaison Committee, was established and for the past twelve months has met frequently. Thus far, the accomplishments have been the renewal of open communications between doctors and nurses, the creation of a joint statement concerning the independent practice of nurses, the development of a "white paper" on the credentialing process of doctors and nurses and a unified effort in opposing detrimental legislation.

D. *Ad Hoc Committee on Obsolete Medical Procedures* — This special committee was formed last year to review the results of a study conducted by the National Association of Blue Shield Plans, the American College of Physicians and the American College of Radiologists wherein they identified certain medical procedures, tests and treatments that are now considered scientifically or medically obsolete. The end results were that these tests and procedures would not be reimbursed for on a routine basis. The committee reviewed approximately 75 different procedures, tests and treatments and was in agreement that they were obsolete. This recommendation went before the Board of Trustees and was approved. Later, Blue Cross-Blue Shield asked the committee to look over a rather lengthy list of procedures, that they had taken from a California study and again, wanted an OSMA blessing. In this situation it was Blue Cross-Blue Shield's intention not to reimburse for the procedures if they were not performed as out-patient procedures. The committee decided that OSMA could not accept their proposal unless they came up with a list prepared by Oklahoma physicians for Oklahoma situations. To this date, Blue Cross-Blue Shield has not responded to the request of the committee. This committee has completed its work and has been dissolved.

E. *Physician Placement* — Last year we reported that OSMA continues to favor some kind of physician placement service but that support for the Council for Health Careers was quickly dwindling. Not only was the OSMA's support withdrawn but all funding ceased and the Council folded. This left us without a

physician placement program. After some discussion with the Medical Center and the Physician Manpower Training Commission, a plan was worked out where the Medical School would handle the placement of Oklahoma graduates and the PMTC, because of their information on Oklahoma community needs, would handle all other physician placement. At this time we feel we have a very good mechanism worked out between OSMA and the PMTC. We look forward to a long and prosperous relationship in physician placement.

OBJECTIVES:

With the creation of the new Health Planning Advisory Committee, a greater effort will be made to stay abreast of the numerous health planning laws and regulations that have such a great effect on Oklahoma physicians. This will be done primarily through regular meetings, special mailings and a newsletter.

The continuance of the OSMA Peer Review Committee is uncertain at this time. The question should be resolved during this meeting of the House of Delegates.

It has become apparent that the Ad Hoc Committee on Independent Practitioners will continue to function on a regular basis. The Council has also been assigned a new committee on Alternative Health Care Delivery Systems. This committee has four members, and Dr James D. Funnell is chairman. The primary function of the committee will be to study the impact of health maintenance organizations and other Alternative Health Care Delivery Systems in Oklahoma and to monitor the progress of any such attempts.

Physician placement is again, well and alive in Oklahoma due to our pact with the Oklahoma Physician Manpower Training Commission. This will continue to need some fine-tuning and support.

RECOMMENDATIONS:

1. That funds be set aside for the Health Planning Advisory Committee to function. (newsletter, direct mailings, etc.)

Budget — \$1000

2. Since health planning is an area of vital concern, more staff time will be allocated, it is recommended that funds be made available for attendance at local, state and national health planning meetings.

Budget — \$2000

3. That OSMA continue in its support of the physician placement process.

4. That the Council be authorized to continue to work with and create committees which are necessary in better identifying problems dealing with medical services.

Budget — \$500

Total budget requested — \$3500

Respectfully Submitted,

Tony G. Puckett, MD, Chairman

Donald C. Barney, MD

Robert J. Blalock, MD

John A. Blaschke, MD

George M. Brown, Jr., MD

Donald L. Cooper, MD

Maurice C. Gephardt, MD

Roger V. Haglund, MD

Michael J. Haugh, MD

Stanley R. McCampbell, MD

Galen P. Robbins, MD

Joseph Salamy, MD

Kenneth E. Whinery, MD

Addendum Report to the PEER REVIEW COMMITTEE TO THE COUNCIL ON MEDICAL SERVICES

The Peer Review Committee reviewed two hundred and four (204) cases over the past year. The Peer Review Committee has spent a great deal of time in several areas such as claims involving cytotoxic food testing, drug utilization and coronary bypass surgery. The committee appointed a special task force to again review cases involving cytotoxic food testing for treatment of mental illness as well as other medical ailments. The task force met twice during 1979 and reaffirmed its previous decision that cytotoxic food testing falls within the experimental nature. In the area of physician prescribing practices and drug utilization, the committee assigned a special task force to address cases that fall in this area.

On April 13, 1980, the Peer Review Committee discussed the future of peer review activities of the Oklahoma State Medical Association in light of the actions between AMA and the FTC. The committee spent a considerable amount of time discussing all of the elements of peer review. The committee was in full agreement that within the structure of organized medicine, there is a place and purpose for medical peer review. The committee felt that the various problems that come before the committee are now being dealt with by medical doctors but if the peer review activities were halted, the avenue for medical review by individuals other than licensed medical doctors

would be broadened. The committee reaffirmed that the Peer Review Committee can only function with the full support from the OSMA House of Delegates.

Report of the
COUNCIL ON MEMBERS SERVICES
(APPROVED AS AMENDED)

INTRODUCTION:

The Council is responsible for planning and carrying out programs that offer direct benefits to OSMA members, constituent medical societies, residents, students, and the OSMA Auxiliary. These benefits include a variety of sponsored insurance programs, travel programs, speaker services, personal counseling, underwriting services, and financial assistance to resident and medical student organizations. The Council also conducts an active recruitment program in conjunction with the county medical society and tries, through surveys and reports, to ascertain the desires of the OSMA membership.

ACTIVITIES:

The largest and most time-consuming activity of the Council has been its efforts to stabilize the professional liability insurance program. Hopefully, with the creation of PLICO we have accomplished that goal, and in future years the Council can concentrate on other efforts. PLICO will still require time and effort, but the present objective is to transfer an increasing amount of the underwriting and management of PLICO to its Board of Directors. (There is a special report in the Delegates' packet on the current status of PLICO.)

Last year the Council recommended and the Board approved a change in carrier for the Hospital Indemnity and Disability Income programs. The new company — Commercial Insurance Company — has completed an aggressive sales campaign, and enrollment is about as expected. Physicians who feel a need for or desire information on these coverages can secure it through the headquarters office or the C. L. Frates Company.

The office overhead expense and the full-time accident plans were maintained with their existing carriers and continue to be stable.

The Council accepted the counselor's recommendation for modification in the group life

program carried by Mass Mutual. Coverages were modified, premiums were lowered, and a special promotional program was inaugurated for residents. The full effect of these changes cannot be evaluated at this time, but the Council asks special permission of the House of Delegates for authority to change the carrier of this program if these efforts are not successful in improving enrollment in the plan.

The OSMA-sponsored pension plan for physicians continues to meet with mixed success. Since its inception, general economic conditions have deteriorated. While the combined management expertise of the J. Hawley Wilson Agency and The First National Bank of Oklahoma City is as good as most such managers in the field, the return on investment has not been satisfactory with some physicians enrolled in the plan. The Council will continue to monitor the pension plan and will recommend that the number of trustees be expanded to include some physicians actually participating in the program.

OSMA-sponsored tours continue to be popular with the membership. In the past year the Council has approved seven different trip opportunities, which attracted about 200 travelers. OSMA-sponsored trips provide considerable cost advantages to participating travellers. The Association bears no expense or liability as a result of the promotion.

The Council has conducted an aggressive recruitment campaign among medical students. Physicians statewide were asked to consider paying county and national dues for a medical student; 200 physicians responded positively. Medical students were asked to make application for membership with the understanding that dues would be paid by a sponsoring physician. Seventy-four students have applied for membership. At the time of the campaign, the Tulsa County Medical Society had no provision in their bylaws for student membership. However, amendments have been made, and students in Tulsa can now join the county society. It is anticipated that a membership campaign will be conducted in the near future. OSMA, through the Council, continues to provide financial aid to medical students and resident representatives who are selected by their respective organizations to represent the groups at national medical meetings.

The Physicians Committee is available to members of the Association who have personal problems that require discreet counseling and treatment. The Committee has worked with a

number of doctors during the year and plans to continue to function in its existing format. Information revealed to the Committee is kept strictly confidential, and no records of the individuals working with the Committee are kept.

Once per year the Council invites all non-members of OSMA to consider membership in their county, state, and national organizations. There are currently 408 licensed physicians who indicate they practice medicine in Oklahoma that are not members of OSMA. While Association membership has continued to increase over the past decade, there are a substantial number of Oklahoma doctors who benefit from OSMA activities that are not paying their fair share of its costs.

The Board of Directors of PLICO has assumed responsibility for many of the Council's duties attendant to the malpractice insurance program, but the Council continues to be responsible for determining the eligibility of physicians who apply for insurance coverage. The underwriting and risk management control committee has a strict underwriting protocol that was developed under our contract with The Hartford Insurance Company. The Association has a similar contract with C. L. Frates & Company, and will continue the underwriting activity for PLICO. In addition, the Council has implemented an aggressive risk management program. Ed Kelsay has returned to the OSMA staff and is currently conducting risk management seminars across the state. Since January almost 5,000 copies of the booklet, *Professional Liability Medical-Legal Guide*, have been distributed to Oklahoma physicians. There have been approximately 20 seminars conducted at county medical or hospital staff meetings which were attended by more than 400 physicians. The basic message is, "How to keep from being sued." There are plans for continuation of the seminars plus slide presentations and other educational efforts. The PLICO newsletter will continue to be published quarterly. Cost of the risk management activities are completely offset by the Association's contract with PLICO.

RECOMMENDATIONS:

The Council requests that the House of Delegates authorize the continuation of its programs and specifically endorse the transfer of its malpractice insurance activities to the PLICO Board of Directors. The present Board of PLICO is representative of the physician population and has done an excellent job in or-

ganizing and managing the new company. There are a number of Council members who serve on the Board, and it is possible that in the event of physician appeals, there could be conflicts of interest.

The Council also requests that the House of Delegates give it authority to change the group life program with the understanding that existing policyholders will be guaranteed coverage with the new company.

Since the Council has made special efforts to recruit students into the Association, we request an increase in budget for student activities.

BUDGET REQUEST:

Council activities	\$3,500.00
Student activities	1,500.00
Resident activities	1,500.00
Total	\$6,500.00

Respectfully submitted,
 C. Alton Brown, MD, Chairman
 John A. McIntyre, MD
 Billy R. Goetzinger, MD
 Thomas C. Glasscock, MD
 Joe Ray Hamill, MD
 Eugene Feild, MD
 Jared L. Bryngelson, MD
 Richard A. McKinne, MD
 David R. Brown, MD
 C. E. Woodard, MD
 Robert A. McLauchlin, MD
 Jerry B. Blankenship, MD
 James S. Jones, MD
 Milton J. Sugarman, MD
 Joe S. Hester, MD
 Gerald R. Dixon, MD
 L. A. Myers, MD

Special Report of the HEALTH PLANNING ADVISORY COMMITTEE (APPROVED)

Because of the importance the Council on Medical Services has placed on health planning, the OSMA Board of Trustees has created this special committee, the Health Planning Advisory Committee. This committee will be made up of all physicians who serve on various health planning agencies and committees of the state. The membership includes physicians who are represented on the Health Systems Agency's Board of Trustees, the six sub-area councils of the Health Systems Agency and the

Oklahoma State Health Coordinating Council. This committee will have as its priorities; to monitor and liaison with health planning organizations; to keep the membership informed on health planning through special mailings and a newsletter system; and to identify physicians who are willing to serve on these various boards and committees.

To date the committee has had one organizational meeting. The committee discussed goals and objectives and reinforced its position concerning the need for a committee of this nature. It was decided that the duties of this committee are very important and much work is going to be involved. There was some concern expressed about the amount of staff support which would be necessary, and the committee suggested that the Board of Trustees consider hiring a full-time health planner to work in this area. This suggestion was recommended to the OSMA Board of Trustees, and some alternatives are being explored at this time. The committee will continue to provide written reports to the Board of Trustees.

Report of the
STATE GRIEVANCE COMMITTEE
(APPROVED)

INTRODUCTION:

The Grievance Committee is a standing OSMA committee organized for the purpose of resolving complaints against physicians brought by other physicians, patients, committees of the Association or public agencies, institutions or organizations that have cause to request the Medical Association's involvement in adjudicating complaints.

The Committee has the responsibility of handling each case in the most appropriate and judicious way. The Committee may use the various county medical societies as a means of adjudicating cases within the local community. If for any reason the local medical society does not take jurisdiction over the case in question, the State Grievance Committee shall thoroughly investigate the complaint and make a decision as to the resolution of the matter and if necessary, refer the matter to the Association's Board of Trustees. In the event referral to the Board of Trustees is made, the Grievance Committee shall act as presenter of fact.

REVIEW OF ACTIVITIES:

During the past year, OSMA has received twenty-six (26) phone calls of a grievance nature and eleven (11) pieces of written communication, not necessarily generated by the telephone calls. These cases have been referred to the appropriate county medical society for resolution.

OBJECTIVES:

The objective of the Committee is to mediate complaints against physicians. The Committee strives to resolve the complaint to the mutual satisfaction of the complainant and the physician, thereby enhancing the Association's public and intra-professional relations. The Committee works with the State Board of Medical Examiners and other professional boards and agencies to accomplish this objective.

RECOMMENDATIONS:

The method of referral to the involved county medical society be continued and the State Grievance Committee be utilized in those cases where the referral is rejected or not satisfactorily adjudicated.

Respectfully submitted,
Stanley R. McCampbell, MD, Chairman
Arnold G. Nelson, MD
Jack Richardson, MD
Orange M. Welborn, MD
C. S. Lewis, Jr., MD
C. Alton Brown, MD
Tony G. Puckett, MD
Kenneth Whittington, MD
James V. Miller, MD

Report of the
PHYSICIANS' CARE COMMITTEE
(APPROVED)

INTRODUCTION:

The purpose of the Physicians' Care Committee is to make itself available to physician members of the Oklahoma State Medical Association who are having significant problems either personally or professionally. Such involvement by the committee shall be unofficial and shall not be considered disciplinary. Association members may request counseling and guidance from this committee. The Physicians' Care Committee will continue to work with component medical societies to afford the impaired physician access to local help if necessary. All phases of this committee's activities

are to be considered privileged and no written record or minutes will be taken.

OBJECTIVES:

The main objective of this committee is to offer some type of help to the impaired in order to restore him to a useful member within the profession and society. A secondary objective of the committee is to seek ways to educate all members of the medical profession as to the potential hazards present within their profession that can lead to many troubles of a personal and professional nature.

RECOMMENDATIONS:

The Committee should continue to seek new ways to make the Association membership aware of the availability of this committee.

The Committee should continue to explore various opportunities to educate physicians (OSMA Newsletters, county medical society meetings) and future physicians (medical school) as to the intent of this committee as well as early warning signs that may indicate potential troubles.

Respectfully submitted,
Joseph B. Ruffin, MD, Chairman
Anthony M. Kowalski, MD
Ray V. McIntyre, MD
George A. Martin, MD
Thomas Rhea, MD
John H. Smith, Jr., MD
Joe L. Spann, MD

Special Report of the AD HOC COMMITTEE ON INDEPENDENT NURSE PRACTITIONERS (APPROVED)

Approximately a year-and-a-half ago the Board of Trustees asked the Council on Medical Services to look into the independent nurse practitioner situation in Oklahoma. The president assigned a committee which had as its purpose to study and recommend action concerning the independent nurse practitioner. The OSMA committee met and decided it would probably serve all interests better to invite the nurses to meet in a joint effort. Thus, the OSMA/ONA Liaison Committee was established.

The Liaison Committee has met on a regular basis over the last twelve months. The feeling is unanimous on both sides, that it has been a worthwhile relationship. The major accomplishments have been the renewal of open communication between doctors and nurses,

the creation of a joint statement (see attachment A) concerning the independent nurse practitioner and a unified effort in opposing detrimental legislation.

Two bills which were being opposed were House Bill 171 (Nurse Midwifery) and House Bill 1936 (Nurse Practitioner). In each case the bill called for the opening up of the Nurse Practice Act in order to identify each specialty. If this happens, all groups of nursing will want recognition and this would create havoc. In order to combat the proposed legislation, the OSMA and ONA wrote a "white paper" (see attachment B) to express our unified support of the current law and opposition to any attempts to change it.

Despite the joint efforts of the Medical Association and the Nurses Association, House Bill 1936 passed both houses of the Legislature and will probably be signed by the Governor. In all probability House Bill 171 will follow in the same manner.

Present plans call for the liaison Committee to continue to meet and written reports will be furnished to the Board of Trustees.

Attachment A *OSMA/ONA LIAISON COMMITTEE* *JOINT STATEMENT ON* *INDEPENDENT NURSE PRACTITIONERS*

INTRODUCTION:

The Oklahoma Nurses Association and the Oklahoma State Medical Association jointly created a liaison committee to determine the relationship of the members of the two organizations with respect to their individual and collective responsibilities in improving care to patients and to improve the relationship between the two professions.

GOALS:

The committee has met on a number of occasions, and through discussion the following basic goals developed:

- (a) To insure that patients receive the highest quality of care possible; and
- (b) To preserve the professional practice integrity of physicians and nurses.

OBJECTIVES:

The committee adopted the following objectives:

- (a) To serve as a means of continuing communication between the ONA and the OSMA and to suggest and coordinate joint activities of the two organizations;

(b) To identify and/or consider problems and trends in patient care directly affecting practice and areas of mutual concern to physicians and nurses;

(c) To consider the implications of joint decisions of the two organizations and assist in their interpretation;

(d) To consider the implications of pertinent activities, policies, and statements undertaken individually by the two organizations and assist in their interpretation; and

(e) To report and make appropriate recommendations to the respective boards of directors of the two organizations.

The committee has studied carefully the educational and licensing processes for physicians and nurses. The licensing-credentialing processes established by state law, professional associations and societies, and by institutions and agencies should potentially guarantee high quality care to patients.

JOINT STATEMENT:

The Oklahoma Nurses Association and its national organization and the Oklahoma State Medical Association and its national organization have endorsed the concept of expanded roles for nurses. Both organizations encourage their respective Board of Examiners to continue to develop rules and regulations that provide adequate safeguards to the public.

Attachment B **COMMITTEE ON INDEPENDENT NURSE PRACTITIONER** *White Paper*

INTRODUCTION:

For the past year the Oklahoma Nurses Association and the Oklahoma State Medical Association have met to identify appropriate relationships for members of the professions in a variety of patient care situations. The basic goals of the organizations were: to insure that patients receive the highest quality medical care possible; and to preserve the professional practice integrity of physicians and nurses.

State and national nursing and medical organizations have endorsed the concept of expanded practice roles for qualified nurses. Medical and nursing educational programs have been enlarged, improved, and train a variety of professionals with unique abilities to render patient care. It is felt that the health

care delivery system should accommodate these specially-trained people so patients can benefit from the services they render.

CREDENTIALING MEDICAL DOCTORS:

Medical doctors are licensed by the Board of Medical Examiners under authority granted by the State, and their practice activities are governed by rules and regulations promulgated by the Board. All licensed medical doctors are entitled to practice medicine as defined by law, which includes surgery. Specialties of medicine are recognized by educational organizations, and doctors are granted specialty designations after they have completed prescribed advanced training (3 to 5 years) and successfully passed an examination.

Hospitals have a credentialing process that requires physicians to demonstrate competence in their field of practice, and various review committees monitor the activities of physicians on an ongoing basis to be certain that doctors keep up to date on the latest medical advances.

In addition to the checks and balances mentioned above, there are programs that evaluate the quantity and quality of medical service in hospitals. The Oklahoma Foundation for Peer Review screens all Medicare and Medicaid hospital claims to ascertain the quality and appropriateness of services. Teams of physicians review on a quarterly basis all hospital services to Medicare-Medicaid patients to assure the credibility of the care. Aberrant practices or services are isolated for remedial action. Almost 50 percent of the patient population of Oklahoma are covered by Medicare or Medicaid.

Private insurance companies also have programs to validate the quality of care rendered to those they insure. Most have contracts with their subscribers, insured, etc., that require physician review of questionable claims for services. Most of this review is done by physician committees of OSMA. Some peer review is performed under private contract with physicians of various specialties.

LICENSING OF NURSES:

Nurses are issued a license by the Oklahoma Board of Nurse Registration and Nurse Education on authority granted by the Legislature in Oklahoma Statutes, Title 59, Section 567.1, the Oklahoma Nursing Practice Act. Nurses eligible for licensure have completed a course of study approved by the Board that meets the

criteria of the national accrediting agency, the American Nurses Association. Nurses are granted the privilege of practicing nursing as defined by the law and within parameters set by the Board through rules and regulations.

DEFINITION OF NURSING:

Oklahoma Statutes define nursing as: "The performance for compensation of any acts, in the observation, care and counsel of the ill, injured or infirm, or in the maintenance of health or prevention of illness of other personnel, or the administration of medications and treatments, as prescribed by a licensed physician or dentist; requiring substantial specialized judgment and skill based on knowledge and application of the principles of biological, physical and social sciences." This is a rather broad definition which permits a variety of patient care situations. A more descriptive definition of modern-day nursing might be: the practice of nursing means the performance for compensation of professional services requiring substantial knowledge of the biological, physical, behavioral, psychological, and sociological sciences and of nursing theory as the basis for assessment, nursing diagnosis, planning, intervention, and evaluation in the promotion of health; the case-finding of illness, injury, or infirmity; the restoration of optimum function; or the achievement of a dignified death. Nursing practice includes administration, teaching, counseling, supervision, delegation; evaluation of practice, and execution of medical regimen including the administration of medications and treatments prescribed by any person authorized by state law to prescribe. Each registered nurse is directly accountable and responsible for the quality of care rendered.

CERTIFICATION:

Nursing, like medicine, has evolved into a variety of specialties that recognizes the unique needs of patients and institutions. A recent count identified 9 specialties of nursing; certified registered nurse anesthetist (CRNA), family nurse practitioners (FNP), and certified nurse midwife (CNM) are but a few of the special care nurses who are qualified by advanced education to render special kinds of nursing care. Nurses recognized to deliver special-nursing care are normally certified by a national organization. There is substantial similarity between the specialty certification process of nurses and physicians. Both rely on educational programs as *prima facie* evidence

of qualifications which is verified by written and clinical examination.

DISCIPLINE AND PEER REVIEW:

The clinical ability of a nurse is monitored by audit and professional review — an ongoing process. Discipline is invoked by the employer — the Oklahoma Nurses Association — and the Board, the final authority.

Upon receipt of approvable credentials, the Board issues a license to practice nursing. Further recognition is granted if specialty education is verified. In an institutional practice credentials are reviewed by the employer and the nurse is required to maintain the standards of practice set by that institution. The quality of nursing practice is evaluated by periodic audits of patient care, which are normally reviewed by multi-disciplined committees. Aberrant practices or conduct are referred to the appropriate body for remedial action with the ultimate penalty being revocation of license by the Board.

Review of the independent nurse's practice is a little less clearly defined but nonetheless effective. At the present time nurses in independent practice have a defined professional relationship with an agency, an institution, or another medical care professional. Services to patients are established by rigid protocol, which is periodically reviewed. Deviations from prescribed activities would result in referral for appropriate disciplinary action.

Finally, nurses, like doctors, are monitored to some extent by the Oklahoma Foundation for Peer Review, which has substantial authority to investigate the quality of patient care delivered to Medicare and Medicaid patients. It is unlikely that inferior nursing services would go undetected for extended periods.

SUMMARY:

Physicians are granted the privilege of practicing medicine under broad statutory authority which permits a fully licensed doctor to practice all of the various specialties of medicine. Doctors who pursue a prescribed residency training program and pass a national Board examination can be designated as specialists. Hospitals and various peer review mechanisms as well as liability insurance coverage act as restrictive mechanisms to insure that doctors practice the specialty of medicine in which they have the most expertise.

The practice of nursing in Oklahoma is properly regulated by an agency of the state, the Board of Nurse Registration and Nurse Education. Oklahoma law and regulations promulgated by the Board are sufficiently broad to accommodate recognition of special care nurses who provide for the unique needs of patients and institutions. Professional peer review, established and ongoing, is adequate to insure the public that inferior nursing services will be detected, corrected, or eliminated.

Special Report of the
OKLAHOMA FOUNDATION FOR
PEER REVIEW, INC.
(APPROVED)

During the past year the Oklahoma Foundation for Peer Review has carried out the tasks of a Professional Standards Review Organization using the review concepts developed under the Oklahoma Utilization Review System known as OURS. While some adjustments were made when the Foundation ended the OURS program and became the PSRO for the State of Oklahoma, the Foundation has been able to maintain the original approach.

Recently the Foundation has experienced a series of evaluations by outside agencies. These include an evaluation of the OURS program by the US General Accounting Office requested by Senator Henry Bellmon and recently completed, a formal assessment of the OURS program by a company named SysMetrics which is still in progress, and an HEW Site Assessment of the PSRO program which is now near completion. Each of these evaluations will be reported separately below.

The Foundation also changed Executive Directors during the past year. Ed Kelsay, the Executive Director of the Foundation from its beginning, resigned to become the legal consultant to the Oklahoma State Medical Association in October, 1979. He graciously consented to continue as the acting Executive Director until the Board of Directors was able to obtain Jerry Kelly as the new Executive Director in late January, 1980. The Foundation's Board of Directors has commended Ed Kelsay for his tremendous assistance in originating the OURS program as well as securing the PSRO grants.

Jerry Kelly comes to the Foundation from the Indiana Area VI Professional Standards

Review Organization located in Terre Haute, Indiana, where he served as Executive Director. Prior to his PSRO experience he worked with the Health Insurance Association of America in their Chicago office.

GENERAL ACCOUNTING OFFICE
EVALUATION:

In April, 1978, the Honorable Henry Bellmon, United States Senate, asked the General Accounting Office to review the Oklahoma Utilization Review System based on the "claims saving of the Oklahoma Plan and of the usefulness of the Oklahoma Model for carrying out P.S.R.O. activities nationwide."

The completed report of the General Accounting Office pointed out a number of problems which the Foundation encountered in attempting to estimate savings which occurred from the OURS program. Foundation estimates were based on many items of incorrect or incomplete data due primarily to data collection through the Medicare and Medicaid agencies in the state. The report also cited three other factors which were not included in the Foundation's estimates:

—The cost of operating OURS, which the GAO computed as being over \$900,000.

—The fact that there is not a one-to-one relationship between a hospital day saved and the reduction in per diem reimbursement because of the fixed cost of maintaining an empty bed and off-setting costs for alternate forms of care.

—The probability that factors other than OURS could be contributing to changes in hospital utilization.

The Foundation had stated that "actual saving generated by the OURS plan during the first twelve months could be as high as \$15.1 million." It did, however, state that it was difficult to arrive at an exact figure since savings were through nonutilization. The GAO strongly attacked the \$15.1 million figure in its final report but still estimated that savings based on reduced days of care might be as high as \$3,147,300 or, when based on reduced claims, as high as \$1,498,235. The Foundation's Board of Directors was amazed at the negative reaction of the General Accounting Office in light of the fact that in 1977 the PSRO program nationally was credited with a net cost saving of only \$5 million.

HEW SITE ASSESSMENT:

In early December, 1979, the Oklahoma Foundation for Peer Review received a site as-

assessment visit from HEW. This type of an assessment is a standard procedure for the evaluation of organizations which carry out the PSRO program around the country. The assessment is supposed to be a type of "peer" review among these organizations nationally.

The Foundation had serious questions about the "peer" nature of the assessment team. Two of the team members came from very small PSROs while a third member of the team worked for HEW rather than a PSRO. The fourth member of the team was the only member who could be considered a true "peer."

Of much greater concern to the Foundation was the fact that the site assessment team did not understand the Oklahoma PSRO program, and especially that portion of the program dealing with hospital utilization monitoring. The Foundation has attempted to answer the particular "problems" cited by the assessment team, but whether this will have any impact on the final report is highly questionable.

The Foundation was already aware of the significant problems which impacted negatively on the computerized data system. The site assessment team pointed out these problems again and made some recommendations as to how they might be solved. The uniqueness of the OFPR data system while avoiding a duplicate collective system at the hospital has in fact created a series of problems not faced by other PSRO organizations.

The Foundation has in fact accepted several recommendations in the draft site assessment report as being good and valid and, in fact, implemented several of the recommendations. It will however continue to urge HEW to make a more vigorous effort to understand the OKLAHOMA APPROACH to PSRO.

OURS PROGRAM ASSESSMENT BY SYSTEMETRICS:

The Foundation is also undergoing another assessment by a special contractor of HEW called SysTeMetrics. In every case in which HEW makes a demonstration project grant, it must also contract with a separate group to assess the demonstration project. The original OURS program was such a demonstration project and is therefore being assessed on that basis. SysTeMetrics has been awarded \$273,275 to conduct this study with a completion date of March, 1981.

In order to carry out the evaluation SysTeMetrics has decided to compare the OURS program in Oklahoma to a similar statewide

operation. The comparison state chosen by SysTeMetrics is the State of Arkansas. They will look at three time periods in order to establish a base line (January-December, 1976), the demonstration project period (January, 1977 to September, 1978), and the period following the demonstration (October, 1978 to December, 1979).

In order to carry out the evaluation of the OURS program, SysTeMetrics has decided to recreate by itself the data for the entire four year period. Whether, in fact, they will be able to actually recapture all of this data is entirely questionable at this point.

Respectfully Submitted,
John A. McIntyre, MD
President, OFPR

Special Report of the OSMA/AMA JAIL PROJECT (APPROVED)

The Oklahoma State Medical Association has undertaken a project to improve medical care and health services within the Oklahoma jail system. The project is an extension of the very successful program conducted over the past several years by the AMA and the Law Enforcement Assistants Administration (LEAA). The program will operate under a \$40,000 Federal grant for an eleven-month period from June 1, 1979 through April 30, 1980.

OSMA's part will be to establish a system to maintain a high degree of medical service within the Oklahoma jails. An OSMA staff executive will function as project coordinator with the assistance of several physician consultants.

The OSMA Jail Project Advisory Committee held its first meeting in January to determine future actions for the project.

OSMA has selected ten jail sites to participate in its project to upgrade jail standards to a level that will comply with those set by the American Medical Association.

The Committee reviewed the deficiencies of each of the selected jail sites and determined that each facility needs a formal, medical authority to act as a mediator between OSMA and the jail. After the committee establishes a medical liaison for each project jail, procedures to upgrade the jail sites will be implemented.

The Committee decided to ask county medical societies having a selected jail site in its county to assist the project as an established

medical authority. It also made plans to ask hospitals within the area of each jail to consider a contractual arrangement for the use of their facilities by jails with inmates who need hospitalization. The committee also decided to locate available county health departments that will provide for some of the medical needs of the jail facilities.

Respectfully submitted,
James B. Pitts, MD, Chairman
Project Advisory Committee
Donald Cooper, MD
Bob Fogel, DO
R. R. Boone, Jr., MD
Jerry D. McCall, MD

Report of the
COUNCIL ON MEDICAL EDUCATION
(APPROVED)

INTRODUCTION:

The Council shall study and make recommendations related to all matters of maintaining or improving the level of competency of physicians in Oklahoma, including but not limited to maintaining liaison with the medical education colleges in Oklahoma, to maintaining liaison with other health professions or occupations, to conducting continuing medical education courses for Association members, to the accreditation of medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by Association policy. Financial aid to education shall also be among the duties of the Council.

REVIEW OF ACTIVITIES:

A. *Requirement of Continuing Medical Education-January 1, 1981.* Provided there is no unexpected action by the House of Delegates which would preclude next year's referendum on mandatory continuing medical education, the deadline on meeting the OSMA requirement will be January 1, 1981. At the present time not quite one-third of the members have applied for or received the American Medical Association's Physician's Recognition Award. Staff is preparing to notify all of those physicians whom we have not received confirmation on from the AMA. It appears that there

is going to be a last minute effort by many to report their hours, and this could cause a delay in the OSMA actually receiving confirmation on some.

B. *Survey of Institutions for Accreditation* – As of now, the Council has surveyed a total of eight institutions or organizations for accreditation to produce and conduct category I continuing medical education. By the end of this year, all but two of the institutions will have been resurveyed and given approval to conduct their CME for four years. Those institutions and organizations which have been approved for conducting category I CME by the American Medical Association and the Liaison Committee on Continuing Medical Education are:

Hillcrest Medical Center, Tulsa, 4 years;
St John Medical Center, Tulsa, 4 years;
St Francis Hospital, Tulsa, 2 years;
St Anthony Hospital, Oklahoma City, 4 years;
South Community Hospital, Oklahoma City, 2 years;
Baptist Medical Center, Oklahoma City, 2 years;
Presbyterian Hospital, Oklahoma City, 2 years; and
Medical Products Systems Inc. (Teleconference Network System) Bartlesville, Oklahoma, 2 years.

We also have applications pending from Children's Memorial Hospital, Oklahoma City, and Valley View Hospital, Ada.

Since the split between the AMA and the LCCME, OSMA has been trying to work with both organizations for accreditation. We have also written letters expressing our concern and encouraging them to resolve their differences and bring us back to one accrediting organization. However, in both situations they have given the OSMA the authority to, not only survey and recommend, but to actually approve the institution for accreditation. This has done away with several months of delay before the hospital actually knew that it had been approved.

The Council also felt that waiting four years before we resurveyed an institution was too long to go without some information. So, the Council voted and it was unanimously approved that at the end of each year, the accredited hospital must report to OSMA as to the number of Category I courses they have produced over the last year, plus they must include the names of the physicians involved in

the preparation of each program. At the end of four years it will be much easier to go in and survey a hospital, when this type of material is available.

C. Liaison with the Department of Continuing Medical Education at the OU Health Sciences Center. – Work is still being done toward the hiring of a Continuing Education Director at the OU Health Sciences Center. Although the process has slowed somewhat, we have still been involved with interviewing several candidates. We feel that this is a very important area and will continue to work with the medical school in whatever capacity we can be of service.

D. Medical School Endowment – The goal of this program is to raise at least \$750,000 to endow a "Chair" for continuing medical education in the University of Oklahoma College of Medicine. The plan calls for each OSMA member, on a voluntary basis, to contribute \$600 to the fund. This can be done at one time or through annual gifts of \$200 for three years. Over the last two years approximately \$72,000 has been contributed. The funds will be invested, and the earned income from the investment will be used to pay the salary of the professor holding the "Chair" position.

E. Medical School Admission Board – The Council continues to be a vital consulting resource in the selection process of board members.

F. Continuing Medical Education Exemption Requests — The House of Delegates, in setting up the requirements for the mandatory CME program, did not stipulate any automatic exemptions. It was the feelings of the Council and approved by the House of Delegates that any physician requesting an exemption should do so in writing to the Board of Trustees. After a process of screening and validating the requests, each would be settled by action of the Board of Trustees on their own individual merits. To date the Board of Trustees has adjudicated eight exemption requests, of which three have been exempted.

OBJECTIVES:

The major project of the Council will be to provide, for the physicians, as much local continuing medical education as possible. This will be achieved through the efforts of our survey and resurvey programs.

As we draw nearer to the deadline of the CME requirement, we are anticipating more exemption requests. We will continue to

handle these as expeditiously as possible so that there is no delay in getting them to the Board of Trustees.

It is also anticipated that with the approaching of the January 1, 1981 mandatory CME policy, the staff is going to be much busier. We are presently studying ways to better handle the records and notification systems.

Our liaison with the OU Health Sciences Center will continue to function, particularly through the several ongoing committees and aid programs.

RECOMMENDATIONS:

1. That the Council continue to actively survey and resurvey institutions for accreditation. Budget — \$1,000

2. That the Council be available to and supportive of the Department of Continuing Medical Education at the OU Health Sciences Center in their efforts of statewide medical education.

3. That the Council support and actively be involved in the ongoing programs of the medical school endowment and the medical school admissions board procedures.

4. That the Council continue to participate in hospital staff and county medical society meetings when requested. Budget — \$500

5. That the Council be allowed to send representatives to local, state and national meetings when appropriate. Budget — \$2,000

Total Budget Request — \$3,500

Respectfully Submitted,

G. Rainey Williams, MD, Chairman

Irwin H. Brown, MD

Wallace Byrd, MD

John W. Drake, MD

F. Daniel Duffy, MD

Bernard E. Guenther, MD

J. M. Guernsey, MD

Norman Haug, MD

Sam C. Jack, MD

Howard B. Keith, MD

James D. Loudon, MD

Robert J. Capehart, MD

Thomas N. Lynn, MD

John M. Moore, MD

Harris J. Moreland, MD

Solomon Papper, MD

William R. Smith, MD

Lowell N. Templer, MD

William G. Thurman, MD

Hal B. Vorse, MD

Kelly M. West, MD

Kenneth W. Whittington, MD

Report of the
COUNCIL ON PROFESSIONAL AND
PUBLIC RELATIONS
(APPROVED AS AMENDED)

INTRODUCTION:

It is the goal of the Council on Professional and Public Relations to influence public opinion through two-way communications and thereby to improve the image of the medical profession. It is also the Council's goal to maintain and improve relationships with other professional organizations and to increase membership participation and thereby improve the Association's rapport with all physicians.

REVIEW OF ACTIVITIES:

The public relations program of this Council and the OSMA was to a large degree determined by the House of Delegates at the 1979 Annual Meeting. During the past year this Council has continued to oversee publication of OSMA newsletters and the *Journal of the Oklahoma State Medical Association*. Newsletters have been expanded to include the general, all-purpose newsletter, OSMA News; OSMA Legislative Update; Medical Cost Update; Malpractice Update; and PLICO News. Both PLICO News and OSMA Legislative Update, however, are more or less independent projects of other OSMA councils.

The public service program of the Association continues to be the major project of this Council. Approximately \$220,000 in complimentary air time has now been received for OSMA public service spots, and original PSA's are now more or less out of rotation. Therefore, the Council produced two new spots during 1979-80. These spots deal with the rising cost of medical care and the proper way to seek a physician referral. The approximate cost of these two spots was \$10,000.

Three new Medical Update brochures were released at approximately the same time as the public service spots. These brochures will deal with cost containment and the voluntary effort and health education. Approximately 35,000 were distributed at no cost to OSMA members.

In an associated project, the Council on Professional and Public Relations has now circulated approximately 50,000 copies of the *Reader's Digest* article "National Health Insurance: A Bitter Pill We Shouldn't Swallow." This article, written by William E. Simon, was

provided free of charge to each OSMA member and additional copies were and are available on order.

The Council also increased its activities in the area of media relations. News releases were circulated on a timely basis during the past year. In all, eleven general news releases were circulated and one general press conference was held.

The one approved project which was not conducted is the production of an audiovisual presentation. Staff investigated the cost of producing such a presentation, and it was determined that work on the AV presentation should be delayed. The cost of professional programs such as this is extremely high, plus there is a need to update the presentation periodically. During the past year OSMA staff has conducted numerous meetings with county medical societies and hospital staffs discussing medical education, the Oklahoma Utilization Review System and the Physicians' Liability Insurance Company, and programs such as these have left little time for showing of an audiovisual presentation.

The Council also continued to be extremely involved in membership recruitment programs. This year such a program manifested itself in the form of a student recruitment program. OSMA through this Council has made special efforts to increase the number of student OSMA members, and we now have pending applications on 66 students. During recent years there have been no student OSMA members.

During the past year there has also been increased use of an informal OSMA speaker's bureau. Names of physicians willing to appear on various programs have been pulled from the list of health education volunteers as well as volunteers for the speaker's bureau itself. The Council is still trying to improve this system, and although it is now functioning more or less informally, the system does appear to be working. During the past year OSMA has provided speakers for approximately 25 programs and seminars.

OBJECTIVES:

In order to meet the objectives of the Council and the Association, a number of ongoing and specific projects are recommended. The Council recommends continued publication of *The Journal of the Oklahoma State Medical Association*, continued and perhaps even increased publication of OSMA News and other

specialized newsletters and the production of other pamphlets and brochures as they prove to be necessary. The Council recommends continuation of meetings with county medical societies and hospital staffs and recommends that production of an audiovisual presentation be considered once again in 1980. The Council also recommends continued and increased activity in the areas of media relations, public relations and professional relations. Serving as a news source for the media is one method of accomplishing this goal. Public service announcements and continuation of the Medical Update project are others. Continued strengthening of the OSMA speaker's bureau also serves this purpose.

During 1980 the Council also recommends that work on a new OSMA medical directory be initiated with a publication date of January, 1981, in mind.

In the past funds have been set aside to enable staff of this Council to travel across the state in order to become better acquainted with members of the media. The Council has a good working relationship with the Oklahoma City media and also with the media in Tulsa. It is, however, difficult to keep up with changes in personnel in areas outside of Oklahoma City, and for this reason the Council plans to hold informal yearly meetings with members of the media. These meetings will either be held in conjunction with the Oklahoma County Medical Society and the Tulsa County Medical Society, or a social get-together will be conducted during the meeting of the Oklahoma Press Association. The Council plans to investigate both possibilities and to initiate this program during 1980-81.

RECOMMENDATIONS:

Specific recommendations of the Council on Professional and Public Relations for the 1980-81 year plus budgetary requirements are as follows:

- A. Media Recognition Award — \$500
- B. Production of Medical Update Brochures — \$4,000
- C. Production of additional public service announcements — \$10,000
- D. Production of audiovisual presentation — \$2,000
- E. Educational activities and professional dues — \$2,000
- F. Meetings with members of the news media — \$1,500
- G. Several years ago the Association de-

veloped a Contingency Fund of approximately \$40,000 designed to be used in counteracting harmful utilization review regulations which were originally handed down by HEW. Due to changes in the law it was not necessary to use this fund, and since that time it has been held in a Certificate of Deposit, and although co-mingled with other Association funds, is earmarked to be used in a public relations/advertising program against passage of National Health Insurance. The Council recommends that this fund continue to be earmarked for this purpose.

Respectfully submitted,
M. Joe Crosthwait, MD, Chairman
H. Clark Hyde, Jr., MD
Armond Start, MD
Alvin Rix, MD
Jerry L. Bressie, MD
John R. Christiansen, MD
Paul Silverstein, MD
Michael Haugh, MD
Richard J. Boatsman, MD
Robert J. Weedn, MD
Eleanor P. Deed, MD
Stan Jett, MD
Sidney D. Williams, MD

Report of THE JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION (APPROVED)

The Journal of the Oklahoma State Medical Association lost a dear and valued friend with the death of Corresponding Editor Ernest Lachman, MD. Doctor Lachman was a source of guidance and inspiration to aspiring authors at the University of Oklahoma Health Sciences Center and truly played an important role in the growth of our Journal. Doctor Lachman will be missed by his colleagues on the Editorial Board and by his friends from across the state.

The Editorial Board of *The Journal* recommends that Solomon Papper, MD, Chairman of the Department of Medicine, University of Oklahoma College of Medicine, be appointed to fill the position of Corresponding Editor of *The Journal of the Oklahoma State Medical Association*.

Respectfully Submitted,
Mark R. Johnson, MD, Editor-in-Chief
Harris D. Riley, Jr., MD
Robert G. Tompkins, MD

Report of the
COUNCIL ON PUBLIC AND
MENTAL HEALTH
(APPROVED)

INTRODUCTION:

It is the goal of the Council on Public and Mental Health to provide the citizens of this state as well as OSMA members timely information regarding the medical aspects of public and mental health and to conduct and oversee needed programs in these areas.

REVIEW OF ACTIVITIES:

The activities of the Council on Public and Mental Health for the 1979-80 year were largely determined by the Report of the Council which was approved by the OSMA House of Delegates in May, 1979, and by the description of the committees which operate under the Council's guidance. The following is an update on the approved program for the Council on Public and Mental Health and the committees which operate under the Council's direction.

A. CPR Training Program: The OSMA CPR training program, which was activated approximately two years ago, has now expired. OSMA has always been dependent upon the American Heart Association for personnel and equipment, and the Heart Association indicates that it is presently conducting the maximum number of CPR training courses. The inability of the Heart Association to conduct additional courses was not made known until after the House of Delegates meeting, and so a decision was made during the year to cease this activity. If the opportunity to reconduct CPR training courses presents itself, the Council would be interested in continuing this program.

B. Health Education Activities: The Council has sought to lend support to health education through its involvement in the Oklahoma Health Education Advisory Council. Several members of the Council on Public and Mental Health as well as OSMA staff are active in this organization whose purpose it is to provide coordination to Oklahoma's health education efforts. Members of the Council and OSMA staff have met with the Commissioner of Health and have discussed a cooperative health education effort including public service television announcements and the use of physician volunteers to aid in the training/education of *student* health instruc-

tors. The Council favored introduction of health education legislation but wanted to coordinate this through the Health Education Advisory Council. The OHEAC decided not to introduce formal legislation during its first year of operation and therefore none is pending with the Oklahoma legislature.

C. Committee on Environmental Quality: Environmental issues to a large degree were considered by the Council rather than calling a formal meeting of the Environmental Subcommittee. Both the Committee on Environmental Quality and the Council on Public and Mental Health have been hesitant to involve OSMA in controversial environmental issues, but instead have attempted to concentrate on physician education at this time.

D. Oklahoma's Emergency Communications System: The Council became interested in what were described as deficiencies in Oklahoma's emergency communications system early in the year and invited Mr. Marcus Barber of the Oklahoma State Health Department to appear at the last Council meeting. Mr. Barber said there were indeed problems with the current system including the fact that emergency communications in Oklahoma were developing in an uncoordinated method. He said many parts of the state had systems which were either inadequate or in need of replacement. He told the Council that efforts were underway to coordinate Oklahoma's system with a new network which would cost approximately \$8 million. He asked for endorsement of OSMA for this project, and the attached resolution was approved by the Council for presentation to the OSMA House of Delegates.

E. Report of the Task Force on Mobile Drug Abusers: One of the principal projects for the Council this year came as a result of a resolution approved by the House of Delegates in May. This resolution called upon the Council on Public and Mental Health to investigate the problem of mobile drug abusers and to present a report to the OSMA Board of Trustees by March 1, 1980. It was not possible to complete the report by the March deadline, and the Board granted the Council an extension until the May 8 Board meeting. A copy of the Report of the Task Force on Mobile Drug Abusers is attached.

F. Maternal Mortality Committee: This Committee is established by Oklahoma law and operates more or less independently from this Council and the Association. Because of a lack of items to review, this Committee did not

meet until mid-April. A report of the Maternal Mortality Committee will be available prior to or at the Annual House of Delegates meeting.

G. Perinatal Task Force: During the past year the Council on Public and Mental Health continued to lend support to the Perinatal Task Force. This organization was formerly a part of OSMA but has now taken on members from other organizations including the Osteopathic Association. The Council gave financial support of approximately \$250 to the Task Force during 1979-80 by printing new letterhead and envelopes and by printing and distributing a questionnaire to all physicians outside of Oklahoma and Tulsa County. A report from the Perinatal Task Force has been requested and should be available prior to or at the Annual Meeting.

OBJECTIVES:

The Council on Public and Mental Health plans to continue and to expand each of the programs listed in the review of activities with the exception of the CPR training program. Health education is expected to receive increasing attention, and it is hoped that a cooperative program can be worked out with the Oklahoma Health Education Advisory Council and the Oklahoma State Health Department. It is still hoped that additional uses can be found for the list of physician volunteers, and the Council intends to continue to support the Maternal Mortality Committee, the Committee on Environmental Quality, and other programs in the area of public and mental health.

RECOMMENDATIONS:

The specific recommendations of the Council on Public and Mental Health for the year 1980-81 plus budgetary considerations are as follows:

- A. Health Education Activities — \$1500
- B. Committee on Environmental Quality — \$500
- C. Maternal Mortality Committee — \$250
- D. Perinatal Task Force — \$500
- E. Internal Educational Programs — \$1,000

Special Report on
MOBILE DRUG ABUSERS
by the
COUNCIL ON PUBLIC AND
MENTAL HEALTH
(APPROVED)

At the 1979 meeting of the OSMA House of

Delegates, a resolution submitted by Ray V. McIntyre, MD, dealing with mobile drug abusers, was approved. This resolution, a copy of which is attached, called upon the Council on Public and Mental Health to study the problem of drug abusers who move from community to community and who seek to secure narcotics and psychotropic drugs from various physicians. The Council was instructed to file a report with the OSMA Board of Trustees prior to March 1, 1980. However, at the February 10 meeting of the OSMA Board of Trustees, an extension was granted and permission was given to file a report to the Board at the May meeting.

The directive of this resolution, (Late Resolution: 12) was discussed at the first meeting of the Council which was held in September, 1979. It was decided that this problem could best be dealt with through a special task force made up of Council members. For that reason Council chairman, Chester Bynum, MD, appointed a three-person committee and charged them with the responsibility of studying the problem and drafting a report. Named to this special Task Force on Mobile Drug Abusers were Gordon Deckert, MD, Charles Smith, MD, and Patricia McKnight, MD.

During the course of discussions, a number of alternatives were suggested. As in the past, suggestions such as a registry of known drug abusers, more stringent prescribing requirements, etc., were discussed. However, as in the past, these were determined to be either unsatisfactory or unworkable. It was the feeling of both the Task Force and the Council that attempts to rehabilitate drug abusers would not be successful, and it was therefore suggested that the most effective manner of dealing with this problem might be through physician education. The Council on Public and Mental Health unanimously agreed with this approach and suggested it to the Task Force on Mobile Drug Abusers. The Task Force concurred, and the following suggestion was jointly agreed upon.

In an effort to deal with mobile drug abusers, the Council on Public and Mental Health and the Task Force on Mobile Drug Abusers called for the following:

A program should be conducted during 1980-81 and perhaps in subsequent years which coordinates the efforts of not only the Oklahoma State Medical Association but other health-related organizations to

educate physicians and other health professionals regarding the problem of mobile drug abusers. This program would provide detailed information about the modus operandi used by drug abusers in order to secure narcotics and psychotropic drugs. The education program for practicing physicians should include the assistance and cooperation of the Oklahoma State Bureau of Investigation, the Narcotics Bureau and other such concerned organizations. Efforts to include such an educational program in medical schools in the state should also be made. Many drug abusers identify and seek out young physicians who have recently opened their practice, and for this reason the program with state medical schools is particularly important.

Both the Council on Public and Mental Health and the Task Force on Mobile Drug Abusers recognize that additional efforts may be required in order to bring this problem under control. We feel, however, that the preceding is a reasonable approach to the problem which could and should be implemented by the Oklahoma State Medical Association.

Report of the
MATERNAL MORTALITY COMMITTEE
(APPROVED)

During the past year four maternal death reports have been reviewed. Drug abuse, alcoholism, and patient refusal to permit examination were notable preventable factors related to the causes of death. The case reports clearly demonstrated the need for public education concerning the sociological factors that may have an ill effect on the health of the pregnant woman. It was noted, however, that public education should not center around case reporting but rather the presentation of the problems causally related to maternal deaths.

Respectfully Submitted,
Adolph N. Vammen, MD, Chairman
Schales L. Atkinson, MD
Frank D. Barnett, MD
Dixon N. Burns, MD
Richard T. Jennings, MD
Warren M. Crosby, MD
Max Deardorff, MD
Sara DePersio, MD

William P. Gideon, MD
Jed E. Goldberg, MD
Gordon K. Jimerson, MD
John B. Nettles, MD
Gary LaBarre, MD
R. G. Schlesinger, MD
E. E. Blackwood, DO
Richard Polk, DO

Report of the
COMMITTEE ON PERINATAL HEALTH
(APPROVED)

Please excuse my belated response to your request for information concerning the scope and the activities of the Committee on Perinatal Health. Following the leading example of similar groups across the nation, the Committee has been constituted for the expressed purpose of improving the outcome of pregnancy in Oklahoma. The Committee membership includes official representatives from different organizations including the Oklahoma State Medical Association, the Oklahoma State Health Department, and from the Oklahoma Chapters of the following organizations: American Osteopathic Association, American Academy of Pediatrics, College of Obstetricians and Gynecologists, American Academy of Family Practice, American Hospital Association, Nurses of the College of Obstetricians and Gynecologists.

The Committee was established two years ago. Dr. Warren Crosby was named Oklahoma State Medical Association representative by President C. S. Lewis. Initially, the Committee prioritized the most present problems affecting perinatal health in Oklahoma. It also analyzed Oklahoma neonatal deaths on the basis of the data available 1976 (Appendix 2) and related to figures available in another rural state (Iowa). Subsequently, the Committee developed a questionnaire which was sent to all Oklahoma hospitals. Its purpose was to take inventory of the facilities and services available in the State (Appendix 3). Upon request by the Oklahoma Health Systems Agency, the Committee provided pertinent information to the Facilities and Services Task Force which was looking into the problems of perinatal health in the state. The adopted report by the Task Force named the Committee on Perinatal Health as a resource to help develop standards of care and to establish a regional perinatal care program (Appendix 4). To fulfill its educational objectives the Committee developed re-

cently (February 1980) an obstetrical practice questionnaire. The questionnaire (Appendix 5) contained questions addressed specifically to physicians practicing in rural hospitals. After analyzing the results of the survey the Committee recognized the urgent need to conduct programs at rural locations. Accordingly, teams of obstetricians, pediatricians, and nurses are currently presenting programs in different areas of the State. Newborn Resuscitation and New Techniques to Recognize High Risk Pregnancies are the subjects being presented. This is only the beginning of an educational curriculum which must reach and support every rural hospital providing obstetrical care in Oklahoma. To further the scope of its educational efforts a series of articles dealing with practical aspects of perinatal and neonatal care will be submitted to *The Journal of the Oklahoma State Medical Association*. The first such article authored by Dr Warren Crosby has recently been completed.

I hasten to emphasize that the activities of the Committee have been carried out by interested individuals who have generously donated their time and traveling expenses. However, the Committee finds it increasingly difficult to fulfill its purpose without additional funding. I am therefore, respectfully requesting the Oklahoma State Medical Association to substantially increase the amount of monies earmarked to the Committee. I will be glad to provide you with a reasonable budget for the upcoming fiscal year.

On behalf of all committee members I would also like to take this opportunity to thank you and the Oklahoma State Medical Association for the assistance that you have provided us in the past.

Sincerely yours,
George P. Giacoia, MD
Chairman
Committee on Perinatal Health

Report of the
COUNCIL ON SCIENTIFIC ASSEMBLY
(APPROVED)

INTRODUCTION:

The Council on Scientific Assembly will work, on request, with other interested medical and allied health organizations to plan and carry out scientific programs for the Association's membership. It shall be responsible for assisting in the planning and publicity of such meetings and for planning and conduct-

ing all educational events and functions not otherwise assigned to other Association councils, committees or officers.

REVIEW OF ACTIVITIES:

The Council has not been involved in any planning, organizing or conducting of scientific programs over the last year due to the number of organizations and institutions around the state which have been accredited and approved to conduct their own continuing medical education programs.

OBJECTIVES:

It is the primary objective of this Council to become involved in planning and organizing the scientific program for the 1981 Annual Meeting of the Oklahoma State Medical Association. Already, ground work has been done under the direction of the 1981 Annual Meeting Chairman and the Chairman of the Council on Scientific Assembly. Several meetings of the Council will be scheduled throughout this year to begin planning for the scientific program for next year's meeting.

RECOMMENDATIONS:

That the Council be allowed a budget in order to conduct the business of preparing the scientific program for the 1981 Meeting of the Oklahoma State Medical Association. Budget — \$500

Total budget requested: \$500

Respectfully submitted,
Hal B. Vorse, MD, Chairman
Paramjit Bajaj, MD
William G. Bernhardt, MD
Robert W. Block, MD
Richard Boatsman, MD
Richard Bottomley, MD
Bob L. Bruton, MD
Orby L. Butcher, Jr., MD
Donald L. Cooper, MD
F. Daniel Duffy, MD
Bill Harrison, MD
R. L. Imler, Jr., MD
Thomas H. Johnson, MD
Tom Johnson, MD
John Kalbfleisch, MD
Roy O. Kelly, MD
John T. Keown, Jr., MD
James Merrill, MD
Jorge Montero, MD
Roger Mueller, MD
W. Stanley Muenzler, MD
Jack Nettles, MD

Alfonso Paredes, MD
Donald R. Resler, MD
Jack D. Shirley, MD
Mark Sullivan, MD
Annette Twitchell, MD
James H. Wells, MD
Dan E. Woodson, MD

Report of the
PERINATAL TASK FORCE
(APPROVED)

May 5, 1980

Richard L. Hess
Associate Executive Director
Oklahoma State Medical Association
601 Northwest Expressway
Oklahoma City, Oklahoma 73118

Dear Mr. Hess,

Please excuse my belated response to your request for information concerning the scope and the activities of the Committee on Perinatal Health. Following the leading example of similar groups across the nation, the Committee has been constituted for the expressed purpose of improving the outcome of pregnancy in Oklahoma. The Committee membership includes official representatives from different organizations including the Oklahoma State Medical Association, the Oklahoma State Health Department, and from the Oklahoma Chapters of the following organizations: American Osteopathic Association, American Academy of Pediatrics, College of Obstetricians and Gynecologists, American Academy of Family Practice, American Hospital Association, Nurses of the College of Obstetricians and Gynecologists.

The Committee was established two years ago. Dr. Warren Crosby was named Oklahoma State Medical Association representative by President C. S. Lewis. Initially, the Committee prioritized the most present problems affecting perinatal health in Oklahoma. It also analyzed Oklahoma neonatal deaths on the basis of the data available 1976 (Appendix 2) and related to figures available in another rural state (Iowa). Subsequently, the Committee developed a questionnaire which was sent to all Oklahoma hospitals. Its purpose was to take

inventory of the facilities and services available in the State (Appendix 3). Upon request by the Oklahoma Health Systems Agency, the Committee provided pertinent information to the Facilities and Services Task Force which was looking into the problems of perinatal health in the State. The adopted report by the Task Force named the Committee on Perinatal Health as a resource to help develop standards of care and to establish a regional perinatal care program (Appendix 4). To fulfill its educational objectives the Committee developed recently (February 1980) an obstetrical practice questionnaire. The questionnaire (Appendix 5) contained questions addressed specifically to physicians practicing in rural hospitals. After analyzing the results of the survey the Committee recognized the urgent need to conduct programs at rural locations. Accordingly, teams of obstetricians, pediatricians, and nurses are currently presenting programs in different areas of the State. Newborn Resuscitation and New Techniques to Recognize High Risk Pregnancies are the subjects being presented. This is only the beginning of an educational curriculum which must reach and support every rural hospital providing obstetrical care in Oklahoma. To further the scope of its educational efforts a series of articles dealing with practical aspects of perinatal and neonatal care will be submitted to *The Journal of the Oklahoma State Medical Association*. The first such article authored by Dr. Warren Crosby has recently been completed.

I hasten to emphasize that the activities of the Committee have been carried out by interested individuals who have generously donated their time and traveling expenses. However, the Committee finds it increasingly difficult to fulfill its purpose without additional funding. I am therefore, respectfully requesting the Oklahoma State Medical Association to substantially increase the amount of monies earmarked to the Committee. I will be glad to provide you with a reasonable budget for the upcoming fiscal year.

On behalf of all committee members I would also like to take this opportunity to thank you and the Oklahoma State Medical Association for the assistance that you have provided us in the past.

Sincerely yours,
George P. Giacoia, MD
Chairman

Committee on Perinatal Health

Report of the
BOARD OF TRUSTEES
(APPROVED AS AMENDED)

INTRODUCTION:

The Board of Trustees of the OSMA has completed three of its quarterly meetings for organizational year 1979-80. The fourth or annual meeting of the Board is being held in conjunction with this Annual Meeting of the Association. The proceedings of the annual Board meeting are covered in the Supplemental Report of the Board of Trustees.

The Board met on August 4 and November 11, 1979, and February 10, 1980. A quorum was certified for each meeting with an average of 13 Trustees, 8 officers and 4 AMA Delegates or Alternates in attendance.

PLICO:

Probably the single most important activity of the Board of Trustees during this year has been the creation of the Physician's Liability Insurance Company. During its November 11 meeting your Board of Trustees voted to approve the creation of a captive insurance company to provide professional liability insurance coverage for Oklahoma medical doctors.

The full history of the development and organization of PLICO will be given to the House of Delegates in other reports. However, there were three actions taken by your Board of Trustees on February 10, 1980, to establish certain policies in connection with the conduct of PLICO's affairs.

First, it was the determination of the Board of Trustees that this House of Delegates should adopt an amendment to the OSMA Bylaws to provide for a refund or partial refund of assessments. The PLICO is being capitalized through an assessment on each policy holder. However, OSMA Bylaws provide that assessments cannot be refunded, although there is a provision for the refunding of dues. Therefore, it was the Board's recommendation that a policy of pro-rata refund of assessments be adopted and that an appropriate amendment to the Bylaws be prepared for consideration by the House of Delegates. This amendment is included in the Report of the Constitution and Bylaws Committee.

The Board established a compensation rate for the members of the Board of Directors of PLICO. In addition, a mileage reimbursement rate of \$.215 . . . the current OSMA rate . . . was established for travel.

In the past the OSMA had made a \$450 surcharge for the necessary background research prior to recommending the issuance of professional liability coverage to non-members. At the recommendation of the C. L. Frates & Co., it was the Board's determination that this \$450 surcharge should be deferred for 1980. If the surcharge was continued, along with the assessment . . . called a "policy fee" for non-members . . . and premium, the coverage offered by PLICO would not be competitive.

AMA:

The Board acknowledged that the American Medical Association has been under pressure from the Federal Trade Commission to extensively alter the "Principles of Medical Ethics." The Board adopted a motion to the effect that a streamlined set of medical ethics would be acceptable so long as they "maintained the basic principles" of the original "Principles of Medical Ethics."

In another action the Board of Trustees authorized the expenditure of \$1,000 to pay the expenses of one medical student from the Oklahoma University College of Medicine to attend the December AMA meeting in Hawaii.

During its February 10 meeting the Board of Directors approved a motion to nominate Dr Donald Cooper for a position on the AMA's Council on Medical Services and Dr Jack Nettles for a position on the AMA's Council on Medical Education.

1981 ANNUAL MEETING:

The 1981 Annual Meeting of the Oklahoma State Medical Association will be held in Oklahoma City. The actual location of the meeting has not been established at this time. The Board discussed the possibility of holding the Annual Meeting in Tulsa every third year, preferably during the year in which the President would be from Tulsa.

INSURANCE PROGRAMS:

During the past year the Board of Trustees considered several proposals for accident and health insurance group coverage for its members and their employees. It was finally determined that the number of health insurance programs already available would make the creation of a new group unnecessary. Therefore, during its February meeting, the Board instructed the Executive Director of the Association to discontinue research on health insurance programs.

JUDICIAL AUTHORITY:

In an exercise of its authority to maintain its own membership whenever there is a resignation, the Board of Trustees selected Charles Clayton, MD, of Mangum, to replace Phillip Kingery, MD, as an Alternate Trustee from District XIV.

The Board was called upon to exercise its specific judicial authority in one instance during the past year. A physician member brought to the Board's attention a grievance that he was having with his component county medical society. After adopting an appropriate protocol, the Board went into executive session to hear the grievance and then determined that it should be referred to the Association's Grievance Committee for investigation and recommendation.

HMO'S:

The subject of HMO's was considered at every Board meeting during the past year. During the August 4 Board meeting it was called to the Trustees' attention that there was a possibility that an HMO would be organized in Oklahoma County. At that time the Board reconfirmed its previous policy, to wit: "Approval of the concept of neutral public policy and fair market competition among all systems of health care delivery."

A report on the progress being made by the possible Oklahoma County HMO was given to the Board on November 11. At that time the Board empowered the President of the Association to appoint an Ad Hoc Committee, to function under the supervision of the Council on Members Services, to monitor the progress of the HMO.

The creation of a permanent committee under the Council on Medical Services was recommended and adopted by the Board during its February 10 meeting. The purpose of the committee would be to study the impact of HMO's and to keep the officers and Trustees informed of any HMO developments in the state.

JAIL PROJECT:

The OSMA was asked by the American Medical Association to participate in a joint AMA-Law Enforcement Assistance Agency National Jail Project. The purpose of the project was to upgrade the medical services available to inmates in city and county jail

facilities. At the same time it was to develop criteria and standards to be utilized nationwide after the completion of this project. The Board of Trustees agreed to participate in the project.

Ten jails agreed to participate in the project with the OSMA. These jails were located in Oklahoma City, Tulsa, Claremore, Hugo, Cordell, Enid, Holdenville, Muskogee, Pauls Valley and Woodward.

A separate report on the jail project is being submitted to the House of Delegates.

PEER REVIEW ACTIVITIES:

Because of recent rulings by the Federal Trade Commission and their attacks on the activities of the AMA and various state societies, the Association has been put in the position of having to reconsider the activities of its Peer Review Committee. Several state medical societies have chosen to abandon this function completely.

It was the decision of the Board of Trustees, during the February 10 meeting, to continue the Peer Review Committee function until such time as it could be considered by this House of Delegates. At the same time the Trustees instructed the Council on Medical Services to devise a recommendation for peer review that would conform to the FTC's restrictions and then bring the recommendations to the House of Delegates.

A detailed report on this particular activity is contained in the Report of the Council on Medical Services.

OFPR:

During the past year the Oklahoma Foundation for Peer Review has undergone a change in its executive directorship. Ed Kelsay had served as the Foundation's director for approximately four years, but has now returned as in-house legal counsel for the OSMA. He was replaced as executive director of OFPR by Mr. Jerry Kelley of Terre Haute, Indiana.

During the past year the Foundation was subjected to a site assessment visit by a team selected by HEW, a separate general accounting office report, and most recently a contract has been released by HEW for an in-depth evaluation of the OURS project.

A separate report on the Foundation's activities is being submitted to this House of Delegates.

The Board of Trustees, at the request of the Foundation, nominated A. Craig Roberson,

MD, of Anadarko, to replace William Matthey, MD, of Lawton on the Foundation's Board of Directors. In addition it is soliciting nominees to replace Fred Switzer, MD, of McAlester.

UNIVERSITY HOSPITAL:

The transfer of University Hospital to the Department of Institutions, Social and Rehabilitative Services, gained statewide notoriety and became a matter of concern to OSMA members. During its February 10 meeting the Board of Trustees were given a full briefing on the situation covering the professional, economic and political aspects of the transfer.

Following the report the Board adopted a resolution authorizing the President of the Association to communicate to Governor George Nigh the Association's continued interest in the Health Sciences Center and in the training and patient care programs being conducted there. In addition, the Board went on record as favoring quality medical education and patient care and stated, "So long as high medical standards are maintained at the state's institutions, we feel physicians will cooperate in the training and teaching programs."

CME:

A question was raised to the Board regarding CME requirements for life members. The Board adopted a policy that life members continuing to practice medicine are not exempt from the CME requirements. In addition, it was determined that should a retired life member choose to return to practice, he must fulfill the CME requirement.

CHARLOTTE LEEBRON:

The OSMA lost its first lady with the untimely death of Charlotte Leebron, the wife of our President William M. Leebron. The Board expressed its sorrow at the loss of Charlotte and its gratitude for her many contributions to the Association in a communication sent to the Leebron family.

A memorial fund was established in the name of Charlotte S. Leebron. During the February 10 Board of Trustees meeting, President Leebron explained that it was his desire to contribute the monies in the fund to the OSMA for use in providing an annual award to the writer of the best scientific paper published in the *OSMA Journal*. The earned interest on the fund will be utilized each year to develop a cash award. The Board of Trustees accepted

the gift in the name of the membership and pledged to Dr Leebron its gratitude.

LIFE MEMBERSHIP AWARDS:

The following physicians have been awarded life membership in the Association through application from component societies and with the approval of the Board of Trustees.

August 4, 1979

Carole A. Buckwalter, MD, Tulsa County
Eric M. White, MD, Tulsa County

November 11, 1979

Roy O. Kelly, MD, Pottawatomie County
Bernice E. McCain, MD, Pottawatomie County
Glen McDonald, MD, Cleveland/McClain County
Ransom F. Ringrose, MD, Logan County
Milton J. Serwer, MD, Oklahoma County

February 10, 1980

George N. Barry, MD, Oklahoma County
William N. Benzing, Jr., MD, Tulsa County
Raymond W. Bryant, MD, Tulsa County
Wallace Byrd, MD, Pontotoc County
William C. Ewell, MD, Tulsa County
Lynwood Heaver, MD, Tulsa County
Claude E. Lively, MD, Pittsburg County
Earl R. Muntz, MD, Pontotoc County
Wendell L. Smith, MD, Tulsa County
Byron W. Steele, Jr., MD, Tulsa County
Paul T. Strong, MD, Tulsa County
Fred D. Switzer, MD, Pittsburg County
William F. Thomas, Jr., MD, Tulsa County
William R. Turnbow, MD, Tulsa County
Charles Hugh Wilson, MD, Oklahoma County
H. B. Yagol, MD, Pontotoc County

In a special action on November 11, 1979, the Board of Trustees recognized that it had granted life member status to Clemens Hartig, MD, as of March 9, 1975. Dr Hartig's life member status had inadvertently not been recorded at that time.

Respectfully Submitted,
Elvin M. Amen, MD, Chairman
Board of Trustees

SUPPLEMENTAL REPORT OF THE BOARD OF TRUSTEES (APPROVED)

Mr. Speaker and Members of the House:
A supplemental report of the Board of Trus-

tees covering actions taken at its annual meeting May 8 is available for distribution to the delegates and will be referred to Reference Committee No. III to be considered along with the annual report of the Board, which was distributed in the delegates' handbook.

The Board meeting convened at 9:30 am with the introduction of special guests including AMA President Hoyt D. Gardner, MD.

The Board approved the minutes of its February 10 meeting as published, and as required by the Bylaws held elections for Chairman and Vice Chairman of the Board. The Board elected Elvin M. Amen, MD, Bartlesville, as Chairman, and Ray V. McIntyre, MD, Kingfisher, as Vice Chairman.

The Board made special presentations to the past Chairmen of the Board, Doctors Crosthwait, McIntyre, and Eskridge.

The Board confirmed the reappointment of Harris D. Riley, Jr., MD, to the Editorial Board of the *OSMA Journal*.

Doctor William M. Leebron made his closing remarks as President of the Association to the Board. His presentation will become an attachment to the official minutes of the Board meeting.

The Board also recognized Theodore D. Benjegerdes, MD, of Alva, for his years of service to his community and patients. Doctor Leebron made the presentation.

The Board read a report from Stanley R. McCampbell, MD, regarding a grievance filed by Thomas J. Leckman, MD, Lawton, and after discussion accepted Doctor McCampbell's report.

Armond H. Start, MD, Secretary-Treasurer of the Association, gave a thorough review of the Association's financial condition and the official audit. Doctor Start also presented to the Board the budget for 1980. The Board accepted Doctor Start's report.

The Board rescinded a previous policy that required that 25 percent of the surplus income be set aside for office equipment and building maintenance.

All reports and resolutions to be presented to the House were reviewed by the Board, and two special reports were heard on mobile drug abusers and peer review. After considerable discussion the Board voted to recommend to the House of Delegates that peer review activities of the Association be suspended as a

result of adverse court rulings and FTC action and authorize a press release that would explain to the public why the Peer Review Committee's activities were suspended.

The Board accepted three Late Resolutions for introduction into the House: Resolutions No. 14, 15, and 16.

In other action, the Board accepted a report of the Council on Planning and Development; agreed to consider specific nurse loan applications as recommended by the OSMA Auxiliary; approved a budget request of the American Medical Student Association; authorized expenditures for a plaque honoring Dean Mark R. Everett; accepted a report from the chairman of the 1981 Annual Meeting Committee requesting the 1981 meeting be held in Shangri-La, Oklahoma, on the dates of May 7-9, 1981; approved nine Life Membership applications, one Affiliate Membership application, and three Undue Hardship applications; heard an OMPAC report from Chairman Orange M. Welborn, MD; approved a capital expenditure for the OSMA headquarters building of up to \$10,000; and set a policy that AMA Delegates and Alternates be invited to all Board of Trustees and Executive Committee meetings including Executive Sessions.

Report of the
PRESIDENT
(APPROVED)

Mr. Speaker, Doctor Miller, Officers, Delegates and Guests,

A year ago we discussed the preservation of the right of the individual to select the physician of his choice and to continue to have the best possible medical care. Many of the problems and many of our activities this year point both directly and indirectly in this direction. The purpose of this organization still remains the promotion of the art and science of medicine. This is our strength, and the strength of any organization lies in the number and the quality of its membership. We continue to grow stronger, better and larger than ever before.

In February of this year we were one of three states to be honored at the AMA Leadership Conference. We exceeded our membership record for the seventh consecutive year and now

have over 3,000 members! This entitles us to a fourth delegate to the AMA. Of particular significance is the fact that our State physician-population ranks 21st, but there are only 12 states that have more delegate representation than we do! Certainly, a vital factor of our growth can be attributed to the maintenance of the unified membership plan. We must stay active at all levels, County, State and National.

This year in January, the OSMA took an important and historical step in the formation of the Physicians Liability Insurance Company. Known as PLICO, it will serve the over 3,000 physicians in our State. The stockholder's equity, which is you—the OSMA—is \$6.9 million in its first year of operation. That enables us to provide professional liability insurance protection for the lowest possible cost. The officers of the company have been selected from our own organization. They work in our own best interests.

To effectively work at Local, State and National levels there has been a tremendous utilization of the talents of many of our members. As shown in each Council report there has been an immeasurable amount of work-hours contributed by very many of you. Since the results of all this effort is detailed and informatively presented in your manuals, there is no need to be repetitive here. Every report merits your attention and thoughtful consideration. The individual chairmen and the members of each Council have all earned our appreciation.

After approval by the House of Delegates and the Board of Trustees, the goals of each Council can be effectively carried out. Augmentation and proficiency may be enhanced in some situations by consideration of "the feasibility of collective action by members in resolving problems affecting their professional independence." This is a function of negotiation. It appears to be a coming need in the future. This year our executive director and I attended the AMA National Negotiation Seminar. While it is to be hoped that a compulsory need situation will not develop, it indirectly will be used regularly in organizational relationships.

Our internal organization continues to function in a most democratic manner. The House of Delegates, representing all our County Medical Societies, together with the Board of Trustees, establishes and approves all of our policies. In turn we are represented at the National Level by our own elected Delegates and

their Alternates. These men whom you all know have done us great service. This year at both of the AMA meetings they have expressed themselves well in representing our State. They continue to work to assure our increasing importance in the National Medical Scene.

The increasing influence of government, at all levels, upon the practice of medicine, may seriously affect the patient-physician relationship and patient care. Negotiations at all levels is an increasing activity and need. Even at State Level changes occur with increasing frequency. Perhaps the most significant change this year was the transfer of the University Hospital to the Department of Human Services. Considerable time and effort was spent by many of us in this process.

We recently returned from Washington where we met separately with almost the entire Oklahoma Congressional Delegation. At a marathon pace, because of limited time, we were able to: express appreciation to our representatives concerning the defeat of the Hospital Cost Containment Act and for their continued interest in Medical Care; to emphasize OSMA support for increased competition in the area of health services including the 20 percent co-insurance program, and the elimination of full or first dollar coverage; to discuss the OURS program with reference to the G.A.O. Report and the coming evaluation by Sys-teMetrics, Inc. of the OFPR. There was also time for extensive briefing by our effective "Man in Washington" and the AMA. The AMA is expanding its office in Washington with the establishment and construction of their new building.

In our own office and building there have been some changes. Ed Kelsay has returned as part-time Legal Counsel. As Executive Director, David Bickham does a most superior job with the responsibility of work delineation and supervision. Offices have been rearranged for greater utility. The ever-increasing amount of work done by all personnel in our offices is excellent and complete. Their efforts are a source of pride, and are much appreciated by all of us who work with them.

A President's work cannot be completed in one year by any means. Incoming President Floyd Miller is already at work and demonstrating remarkable ability. We have discussed remaining problems and changes that should be considered. Included for thought is the establishment of executive policy, precedence and protocol. With Floyd in the position

news

of leadership, it should be a very good year for us all.

In closing, I find myself very fortunate, for I am 3,000 friends richer. To each of you, and all of you, sincere appreciation.

Report of the
SECRETARY-TREASURER
(APPROVED)

INTRODUCTION:

The House of Delegates approved a recommendation made last year that changes the fiscal year of the Association to coincide with the dues year — January 1 - December 31. The Association books were closed December 31st and audited reports are included in the Delegates packets. Revenues have exceeded expenses for the past two years, and the surplus has been added to Association net worth which now approximates \$450,000. By all accounting standards the Association is in a good sound fiscal position.

OSMA is the sole shareholder of Physicians Liability Insurance Company stock, and as a result, the Association audit reflects the value of PLICO. This is the only significant change in the audit from previous years.

MEMBERSHIP:

OSMA's membership has grown moderately each year for the past decade. Our membership records at the close of the fiscal year indicate:

Regular Members	2,558
Affiliate Members	10
Life Members	233
Junior Members	273
Hardship	<u>4</u>
Total	3,078
Pending	<u>205</u>
	3,283

INCOME:

Membership dues account for 70% of Association income, 30% comes from investment income, lease income, commissions from the AMA, advertising and services the Association sells such as Underwriting and Risk Management services, mailing lists and the membership directory, etc. 1980 projected income and its sources are as follows:

Membership Dues	\$433,000
Advertising & Subscriptions	66,000

Interest & Commissions	30,000
Lease Income	8,200
Underwriting & Risk Mgt. Fees	77,500
Directory Sales	3,750
Miscellaneous & Data Services	3,500
Jail Project	<u>40,000</u>
Estimated Total Income	\$661,950

EXPENSES:

The Association expenses, both fixed and variable, continue to rise with inflation. Our accountants have advised us that we should anticipate a 13% increase in general expense and slightly more for travel and fuel related activities. Program expenses are based upon recommendations of the various councils and show a modest increase over last year's budget.

Since the Executive Committee has not met to make salary adjustments, the budget reflects no increases in salary expenditures.

Expenses:

General Membership	\$380,000
Councils	57,250
In-State Travel	9,000
Out-of-State Travel & AMA Conventions	65,000
OSMA Newsletters	3,500
Membership Directory	3,000
Risk Mgt. & Underwriting	77,500
Journal Expenses	50,000
Commissions to County Societies	<u>4,500</u>
Estimated Total Expense	\$649,750
Surplus or Loss	\$ 12,220

For the past two years the councils have underspent their budgets and in fact almost all expense items were equal to or less than the budgeted amounts. Hence, the modest surpluses.

Therefore, the Association can operate in 1980 without additional revenues, but it is obvious that an adjustment will be necessary to fund the budget in 1981 if existing programs are to be continued. If the House of Delegates votes a dues increase at this Annual Meeting, it will not take effect until January, 1981.

A detailed budget is listed below:

General Membership

Salaries	\$219,340
Payroll Taxes	13,680
Pension Costs	20,069
Office Supplies	22,325
Legal and Audit	7,000
Postage and Shipping	10,000
Telephone and Utilities	21,350
Dues and Subscriptions	2,000

Repairs and Maintenance	5,500	
Insurance	25,350	
Equipment Rental	8,700	
Staff and Officers Expense	9,500	
Awards	2,500	
Data Processing	2,500	
Other General Expenses	5,886	
Services	4,300	
Total		\$380,000

<i>Councils</i>		
Governmental Activities	\$16,000	
Professional and Public Relations	20,000	
Planning and Development	3,000	
Medical Education	3,500	
Medical Services	3,500	
Members Services	7,000	
Public and Mental Health	3,750	
Scientific Assembly	500	
Total		\$ 57,250

<i>Other Expenses</i>		
In-State Travel	\$ 9,000	
Out-of-State Travel & AMA Conventions	65,000	
OSMA Newsletters	3,500	
Membership Directory	3,000	
Risk Managment & Underwriting	77,500	
Journal Expenses	50,000	
Commissions to County Societies	4,500	
Total		\$212,500
Total Expenses		\$649,750

Note: An audited report will be available at the House of Delegates Opening Session.

Respectfully Submitted,
Armond Start, MD, Secretary-Treasurer

Report of the
COUNCIL ON
PLANNING AND DEVELOPMENT
(APPROVED)

INTRODUCTION:

The Council met on two occasions during the year. Once, to discuss the manner in which the association should react to a proposed HMO to be started in the Oklahoma City area and in an extended planning session on March 14 and 15 to review past and proposed council activities. The council recommended to the Board of Trustees that a special committee be created under the Council on Members Services to monitor and communicate to the membership, activities of organizations that propose to start "Alternative Health Care Delivery Systems." The Committee has been appointed with Jim Funnell, MD, Oklahoma City, as Chairman.

In the planning and review sessions, the

Council discussed the activities of each council and its proposed budget. There were suggestions and alterations made in some work programs. Following is the suggested "program of activities" for the next year.

ANNUAL PROGRAM OF ACTIVITIES

A. Council on Governmental Activities — The Council plans to continue and strengthen its State legislative activities by improving its "Key Man" program and soliciting more help from the Auxiliary. The Council also recommends continuance of its Washington program, which has proven to be very successful, and plans an aggressive educational program to encourage other state associations to start similar programs.

1979 Budget, \$15,000
Proposed Budget for 1980 \$15,000

B. Council on Medical Services — The Council has a number of major issues to resolve and monitor. A new committee on Health Planning has recommended to the Board that a fulltime Health Planner be added to the staff. The Council on Planning and Development concurs with the committee that health planning is critical to OSMA members but feels a redistribution of staff responsibilities would be a better way to solve the problem, than adding new personnel at this time. The Council must also deal with a very difficult Peer Review problem. The recent FTC ruling, now on appeal by AMA, prohibits medical societies from adjudicating claims. The Council also has committees on Independent Nurse Practitioners, Obsolete medical procedure and alternative health care delivery systems.

1979 Budget \$3,000
1980 Proposed Budget \$3,500

C. Council on Members Services — This has been an extremely active council. It is responsible for OSMA's insurance programs including PLICO which has dominated its activities this year. The Council is also involved in activities with students, residents and Auxiliary. It plans to produce a new membership brochure in 1980 explaining the benefits of OSMA membership.

1979 Budget \$3,000
1980 Proposed Budget \$6,500

D. Council on Medical Education — The Council plans to continue to survey and resurvey institutions that provide Category I CME

courses, and to be active in promoting Continuing Medical Education for physicians.

1979 Budget \$2,000

1980 Proposed Budget \$3,500

E. Council on Professional and Public Relations — This Council proposed an aggressive and well balanced public relations program which is an extension of existing programs. The major, single expenditure is for additional public service announcements which have proven popular to most of the State's TV stations.

1979 Budget \$25,000

1980 Proposed Budget \$20,000

F. Council on Public and Mental Health — The proposed programs of the Council concentrate on educational activities in environmental quality, maternal mortality, perinatal planning and health education.

1979 Budget \$2,500

1980 Proposed Budget \$3,750

G. Council on Scientific Assembly — The Council has been inactive in 1979 but has been given the responsibility of planning the scientific portion of the 1981 annual meeting.

1979 Budget \$1,000

1980 Proposed Budget \$1,000

H. The Council on Planning and Development — This council normally holds two meetings each year to review the association's activities. One of the sessions is generally a two-day meeting which necessitates lodging and food costs.

1979 Budget \$3,500

1980 Proposed Budget \$3,500

TOTAL 1979 Budget \$54,500

TOTAL 1980 Proposed \$57,250

In the opinion of our Council, the annual program of activities as outlined above and in the council reports, represents a comprehensive and achievable association program. We recommend its adoption.

Respectfully submitted,
Marvin K. Margo, MD, Chairman
William M. Leebron, MD
Floyd F. Miller, MD
S. N. Stone, MD

Elvin M. Amen, MD
Armond H. Start, MD
James B. Pitts, MD
George H. Kamp, MD
J. B. Eskridge, III, MD
Ed L. Calhoon, MD
Harlan Thomas, MD
M. Joe Crosthwait, MD
Rex E. Kenyon, MD
Orange M. Welborn, MD
C. Alton Brown, MD
Tony G. Puckett, MD
Perry A. Lambird, MD
G. Rainey Williams, MD
Chester L. Bynum, MD

AUDIT REPORT (APPROVED)

House of Delegates
Oklahoma State Medical Association
Oklahoma City, Oklahoma

We have examined the balance sheet of the Oklahoma State Medical Association as of December 31, 1979 and March 31, 1979 and the related statements of revenue and expenses, changes in fund balance, and changes in financial position for the nine months ended December 31, 1979 and the year ended March 31, 1979. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of Physicians Liability Insurance Company, a subsidiary, which statements reflect total assets and net income constituting 58 percent and 21 percent, respectively, of the totals. These statements were examined by other auditors whose report thereon has been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included for Physicians Liability Insurance Company, is based solely upon the report of the other auditors.

The Oklahoma State Medical Association does not provide for depreciation on buildings as is required by generally accepted accounting principles.

In our opinion, based upon our examination and the report of other auditors, except as noted in the preceding paragraph, the financial

statements referred to above present fairly the financial position of the Oklahoma State Medical Association as of December 31, 1979 and March 31, 1979 and the results of its operations and the changes in its financial position for the nine months ended December 31, 1979 and the year ended March 31, 1979 in conformity with generally accepted accounting principles applied on a consistent basis.

Moak, Hunsaker, Rouse, Thomas & Co.

Oklahoma City, Oklahoma
January 11, 1980

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	DECEMBER 31, 1979	MARCH 31, 1979
LIABILITIES AND FUND BALANCE		
CURRENT LIABILITIES		
Current portion of long-term liabilities — Note 4	\$ 6,070	3,671
Current obligation under capital lease — Note 2	3,875	—
Accounts payable—Note 5	86,359	105,203
Loan and scholarship payable	55,907	53,284
Accrued liabilities —		
Interest	19,160	—
Payroll taxes	396	1,599
Retirement expense	12,750	—
Deferred income — Note 6	1,461,548	316,800
Total Current Liabilities	1,646,065	480,557
LONG-TERM LIABILITIES — Note 4		
Notes payable — Secured by partial pledge of property and equipment	1,075,173	21,643
Less: Current portion included above	6,070	3,671
	1,069,103	17,972

LONG-TERM OBLIGATION UNDER CAPITAL LEASE—Note 2		
Lease payable—Secured by pledge of equipment	25,650	—
Less: Current portion included above	3,875	—
	21,775	—
FUND BALANCE		
Appropriated for public education	33,244	33,244
Appropriated for building maintenance	30,217	15,859
Unappropriated	381,582	338,508
	445,043	387,611
TOTAL	\$3,181,986	886,140

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF REVENUE AND EXPENSES
FOR THE NINE MONTHS ENDED DECEMBER 31, 1979 AND
THE YEAR ENDED MARCH 31, 1979

	DECEMBER 31, 1979	MARCH 31, 1979
OKLAHOMA STATE MEDICAL ASSOCIATION BALANCE SHEET DECEMBER 31, 1979 AND MARCH 31, 1979		
ASSETS		
CURRENT ASSETS		
Cash	\$ 23,625	10,182
Savings accounts and certificates of deposit	342,584	485,845
Accounts receivable	1,187,985	43,428
Accrued interest receivable	3,424	2,094
Prepaid expenses	8,778	9,249
Total Current Assets	1,566,396	550,798
PROPERTY AND EQUIPMENT — Partially pledged to secure long-term debt—		
Land	7,808	7,808
Building	371,955	278,708
Pavement	2,451	2,451
Furniture, fixtures and equipment	96,194	90,953
Equipment under capital lease—Note 2	25,650	—
	504,058	379,920
Less: Accumulated depreciation and amortization	52,552	44,578
	451,506	335,342
INVESTMENT IN SUBSIDIARY—Note 3	1,162,338	—
OTHER ASSETS		
Deposits	1,746	—
TOTAL	\$3,181,986	886,140

	DECEMBER 31, 1979	MARCH 31, 1979
FROM OPERATIONS		
Revenue—		
Membership dues	\$331,458	337,727
Interest and commissions	16,462	23,729
Building lease income	16,650	22,200
Membership directory	3,605	13,884
Underwriting and risk management surcharge income	44,289	35,319
Income from investment in subsidiary	12,338	—
Miscellaneous	4,298	3,692
	429,100	436,551
Expenses—		
General membership	233,157	267,036
Depreciation	7,973	7,861
Council	23,520	34,834
In-state travel	5,900	6,737
Out-of-state travel and AMA convention expense	44,663	21,960
OSMA Newsletter	1,263	4,893
Commissions to county societies	—	4,234
Membership directory	2,536	10,496
Underwriting contract	1,193	1,047
	320,205	359,098
	108,895	77,453
JOURNAL		
Revenue—		
Subscriptions allocated from dues	18,000	23,812
Advertising and sales	25,790	35,368
	43,790	59,180
Expenses	71,359	95,288
	(27,569)	(36,108)

The accompanying accountants' report and notes are an integral part of this statement. Certain 1978 amounts have been reclassified to conform to 1979 presentation.

ANNUAL MEETING

Revenue—		
Booth sales	29,800	—
Ticket sales	8,629	—
Contributions	2,000	—
Other	—	3,223
	40,429	3,223
Expenses	64,323	12,635
	(23,894)	(9,412)
Excess of Revenue Over Expenses	\$ 57,432	31,933

The accompanying accountants' report and notes are an integral part of this statement.

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF CHANGES IN FUND BALANCE
FOR THE NINE MONTHS ENDED DECEMBER 31, 1979 AND
THE YEAR ENDED MARCH 31, 1979

	DECEMBER 31, 1979	MARCH 31, 1979
<i>APPROPRIATED FOR PUBLIC EDUCATION</i>		
Note 7		
Beginning of period	\$ 33,244	32,120
Excess of revenue over expenses	—	1,124
End of period	33,244	33,244
<i>APPROPRIATED FOR BUILDING MAINTENANCE—</i>		
—Note 8		
Beginning of period	15,859	7,876
Appropriation for period	14,358	7,983
End of period	30,217	15,859
<i>UNAPPROPRIATED</i>		
Beginning of period	338,508	314,558
Excess of revenue over expenses	57,432	31,933
	395,940	346,491
Appropriated for building maintenance	14,358	7,983
End of period	381,582	338,508
TOTAL	\$445,043	387,611

The accompanying accountants' report and notes are an integral part of this statement.

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE NINE MONTHS ENDED DECEMBER 31, 1979 AND
THE YEAR ENDED MARCH 31, 1979

	DECEMBER 31, 1979	MARCH 31, 1979
<i>WORKING CAPITAL PROVIDED</i>		
From operations—		
Excess of revenue over expenses	\$ 57,432	31,933
Expenses not requiring outlay of working capital during the current period—		
Depreciation	7,973	7,861
Total from Operations	65,405	39,794
Proceeds from long-term liabilities	1,300,000	22,500
Increase in long-term obligation under capital lease	21,775	—
Increase in appropriated for public education	—	1,124
Total Working Capital Provided	1,387,180	63,418
<i>WORKING CAPITAL USED</i>		
Purchase of property and equipment	124,137	93,469
Increase in other assets	1,746	—
Increase in investments	1,162,338	—
Reduction of long-term liabilities	248,869	4,528
Total Working Capital Used	1,537,090	97,997
Decrease in Working Capital	149,910	34,579

CHANGES IN WORKING CAPITAL

Current assets —		
Cash	13,443	(3,918)
Savings accounts and certificates of deposit (143,261)	71,184	
Accounts receivable	1,144,557	28,685
Accrued interest receivable	1,330	844
Prepaid expenses	(471)	6,505
Increase in Current Assets	1,015,598	103,300
Current liabilities—		
Current portion of long-term liabilities	2,399	3,671
Current obligation under capital lease	3,875	—
Accounts payable	(18,844)	62,551
Loan and scholarship payable	2,623	16,707
Accrued liabilities	30,707	137
Deferred income	1,144,748	54,813
Increase in Current Liabilities	1,165,508	137,879
Decrease in Working Capital	\$ 149,910	34,579

The accompanying accountants' report and notes are an integral part of this statement. Certain 1978 amounts have been reclassified to conform to 1979 presentation.

OKLAHOMA STATE MEDICAL ASSOCIATION
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 1979 AND MARCH 31, 1979

(1) Significant Accounting Policies—

The following is a summary of certain significant accounting policies followed in the preparation of these financial statements.

Property and equipment—

Property and equipment, including capitalized leases is recorded at cost. Depreciation over the estimated useful lives of the property, except building, is computed using the straight-line method. Depreciation is not provided on the building.

Capital leases—

Capital leases are accounted for under the Statement of Financial Accounting Standards No. 13, Accounting for Leases. Under this method of accounting for capital leases, the asset is amortized on a straight-line basis over the useful life of the asset and the obligation, including interest thereon, is liquidated over the life of the lease.

Deferred income—

All income is prorated over the calendar years to which it applies. Investment in subsidiary—

Investment in the related entity is accounted for by the equity method. Under this method the Association's equity in the net earnings or losses of the subsidiary is included currently in the Association's statement of revenue and expenses. Dividends received from the subsidiary are reflected as a reduction of the investment. The carrying value of the investment approximates the underlying equity of the subsidiary.

Loan acquisition costs—

Loan acquisition costs are amortized on a straight-line basis over the life of the loan.

Organization—

The Oklahoma State Medical Association was organized as a nonprofit organization and as such is exempt from income taxes under Section 501(c) (6) of the Internal Revenue Code.

OKLAHOMA STATE MEDICAL ASSOCIATION
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 1979 AND MARCH 31, 1979

(2) Lease and Commitments —

The Association entered into a capital lease during the nine months ended December 31, 1979.

The following is a schedule by years of future minimum payments under the capital lease together with the present value of net minimum lease payments as of December 31, 1979:

Fiscal year ended December 31—

1980	\$ 6,984
1981	6,984
1982	6,984
1983	6,984
1984	6,984

Total Minimum Lease Payments	34,920
Less: Amount representing interest	9,270
Present Value of Net Minimum Lease Payments	25,650

Less: Current portion of obligation under capital lease	3,875
Long-Term Obligation Under Capital Lease	\$21,775

Since the leased property was not in use as of December 31, 1979, no amortization of leased property or interest expense was recorded in the nine months ended December 31, 1979.

(3) Investment in Subsidiary—

On May 3, 1979 the House of Delegates of the Oklahoma State Medical Association passed a resolution empowering the members of the Board of Trustees of the Association to organize and form an insurance company wholly owned by the Association for the purpose of writing professional liability and related lines of insurance on Oklahoma physicians. On October 17, 1979 the Physicians Liability Insurance Company was formed and capitalized by the Association in the sum of \$150,000 in capital stock and \$1,000,000 of paid-in capital. Insurance policies written by the Company will be effective January 1, 1980.

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1979 AND MARCH 31, 1979

(4) Long-Term Liabilities—

The following is a summary of the current and long-term portion of notes payable:

	December 31, 1979		March 31, 1979	
	Current Portion	Long-Term Portion	Current Portion	Long-Term Portion
Installment note payable to a Company — Secured by equipment — Payable in 60 monthly payments of \$489 including interest at 11 percent, commencing January, 1979	\$3,985	14,943	3,671	17,972
Installment note payable to a Company—Secured by real estate—Payable in 180 monthly payments of \$1,448 and one payment of \$69,548 at the end of note including interest at 10 percent, commencing November, 1979	2,524	147,079	—	—
Note payable to a Bank—Secured by special assessments — Single payment note — Interest rate of 12 percent — Due date of April 1, 1981	—	913,120	—	—
	6,509	1,075,142	3,671	17,972
Less: Loan acquisition costs on above real estate note	439	6,039	—	—
Total	\$6,070	1,069,103	3,671	17,972

(5) Accounts Payable—

The following is a summary of the accounts payable:

	December 31, 1979	March 31, 1979
Trade	\$17,806	21,857
Dues	21,598	2,255
County commissions	—	2,923
Building construction costs	1,500	38,563
Medical education endowment	45,455	39,605
Total	\$86,359	105,203

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1979 AND MARCH 31, 1979

(6) Deferred Income—

The following is a summary of deferred income:

	December 31, 1979	March 31, 1979
Dues	\$411,977	263,970
Journal	—	18,000
Underwriting and risk management surcharge	—	13,230
Annual meeting	5,750	21,600
Special assessment—1980	1,043,821	—
	\$1,461,548	316,800

On May 3, 1979 the House of Delegates passed a resolution establishing a special assessment. The proceeds of such assessment will be used exclusively for payments of costs of forming and funding the Physicians Liability Insurance Company, a wholly owned subsidiary of the Association. The assessment will not exceed \$2,000 per insured physician who is a member of the Association. The assessment will be due on an installment basis over the next three years beginning January 1, 1980.

The deferred special assessment income as of December 31, 1979 is comprised of receipts of \$395,463 plus unpaid special assessments billed in advance of \$768,058 less a prepaid expense of \$119,700. The prepaid expense relates to an organization fee of Physicians Liability Insurance Company paid to an insurance agent.

(7) Public Education Appropriation —

During the fiscal year ended May 31, 1976, the Board of Trustees authorized the amounts collected through special assessments to be transferred to the Public Education Appropriation. The appropriation will be used to inform the general public of governmental, legislative and bureaucratic regulations over the medical profession and the public.

(8) Building Maintenance Appropriation —

The Board of Trustees has adopted the procedure of appropriating 25 percent of the net operating revenue for each period toward building maintenance.

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1979 AND MARCH 31, 1979

(9) Professional Liability Stabilization —

The Professional Liability Stabilization Program was established during the year ended May 31, 1976 by assessing the doctors a 15 percent surcharge on their basic professional liability policy. The Insurance Company of North America provides the basic \$100,000/\$300,000 policy. This money is under the control of two trustees, one appointed by the Medical Association and one appointed by the insurer. As of December 31, 1979 the balance on deposit was \$269,468, which is not included in the financial statements. The money will not be utilized unless all established reserves of the insurer are first exhausted through the payment of claims.

(10) Professional Liability Excess Coverage—

During the fiscal year ended March 31, 1977, an insurance plan was formed with Hartford and Lloyd's of London to provide excess professional liability coverage. The excess liability policy will cover losses in excess of \$100,000 and less than \$1,000,000 that exceed \$3.25 million per year. In accordance with the plan, a specified portion of the insurance premiums were deposited in a bank in the name of the Oklahoma State Medical Association. The balance of the account on December 31, 1979 was \$800,723, which is not included in the financial statements. The funds will be used if the insurers' reserves are exhausted through payment of claims.

SUPPLEMENTAL MATERIAL

House of Delegates
Oklahoma State Medical Association
Oklahoma City, Oklahoma

Our examination of the financial statements included in the preceding section of this report was directed to an expression of our opinion on these statements taken as a whole. The supplemental material presented in the following section of this report has been subjected to certain audit procedures applied in connection with our examination of the financial statements. This information, while not considered necessary for the fair presentation of the financial position, results of operations and changes in financial position of the Association, is in our opinion fairly stated in all material respect when considered in relation to the financial statements taken as a whole.

Oklahoma City, Oklahoma
January 11, 1980

OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULES OF EXPENSES
FOR THE NINE MONTHS ENDED DECEMBER 31, 1979 AND
THE YEAR ENDED MARCH 31, 1979

	DECEMBER 31, 1979	MARCH 31, 1979
GENERAL MEMBERSHIP EXPENSES		
Salaries	\$131,740	157,012
Payroll taxes	8,752	10,453
Pension costs	13,324	16,248
Office supplies	14,753	19,447
Legal and audit	5,965	5,443
Postage and shipping	6,643	13,541
Telephone and utilities	14,098	18,223
Dues and subscriptions	1,510	1,988
Repairs and maintenance	3,585	2,382
Insurance	16,833	20,316
Equipment rental	6,440	9,383
Staff and officers' expense	2,810	6,747
Awards	1,675	2,566
Other general expense	3,870	7,502
Data processing	1,476	7,691
Services	2,838	1,893
Interest	24,332	611
Total Before Allocation of Overhead	260,644	301,446
Overhead allocated to Journal	(6,389)	(21,775)
Overhead allocated to annual meeting	(21,098)	(12,635)
Total	233,157	267,036
JOURNAL EXPENSES		
Salaries	27,000	28,128
Printing	26,636	28,596
Advertising	7,576	13,312
Art work	1,210	1,825
Proofreading	462	524
Supplies	104	308
Other	1,982	820

Total Before Allocation of Overhead	64,970	73,513
Overhead allocated from general membership expenses	6,389	21,775
Total	\$71,359	95,288

OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULES OF EXPENSES
FOR THE NINE MONTHS ENDED DECEMBER 31, 1979 AND
THE YEAR ENDED MARCH 31, 1979

	DECEMBER 31, 1979	MARCH 31, 1979
COUNCIL EXPENSES		
Governmental Activities	\$14,390	25,930
Professional and Public Relations	3,343	6,656
Planning and Development	1,955	1,488
Medical Education	1,070	1,282
Medical Services	(596)	(1,714)
Member Services	3,308	630
Public and Mental Health	50	562
Total	23,520	34,834
ANNUAL MEETING EXPENSES		
Exhibit	2,970	—
Planning	908	—
Printing	4,299	—
Speakers	6,300	—
Entertainment	12,219	—
Luncheons and receptions	3,534	—
Signs and security	1,963	—
Audio-visual equipment	922	—
Hotel	2,792	—
Ladies activities	3,035	—
Miscellaneous	4,283	—
Total Before Allocation of Overhead	43,225	—
Overhead allocated from general membership expenses	21,098	12,635
Total	\$64,323	12,635

Report of the
CONSTITUTION AND
BYLAWS COMMITTEE
(APPROVED AS AMENDED)

The following series of proposed amendments to the OSMA Constitution and Bylaws are in the nature of "housecleaning." Over the past several years the Bylaws have been amended in a piecemeal fashion, and a number of inconsistencies and redundancies have slipped in. The following proposed amendments will eliminate or clarify problem areas.

1. GENERAL OFFICERS

The "general officers" of the Association are mentioned in several places in the Constitution and Bylaws. References are not always consistent.

Article VIII of the Constitution is amended to read as follows:

Section 1. The general officers of the Association shall be the president, president-elect, immediate past-president, vice-president, secretary-treasurer, speaker of the House of

Delegates, vice-speaker of the House of Delegates, and *the* chairman and *vice-chairman* of the Board of Trustees.

Section 2. General officers shall be elected by the House of Delegates at its annual meeting, with the exception of the immediate past-president who shall remain as an officer in this capacity for a period of one year following the completion of his term as president and with the exception of the chairman and *vice-chairman* of the Board of Trustees, who shall be selected by the Board. The House of Delegates may remove any general officer from office for cause.

The following amendments are recommended to the *Bylaws* in order to bring them into compliance with the above cited section of the *Constitution*.

Chapter IV, Section 2.00, should be amended by striking the entire last sentence in the section since it is redundant.

Section 2.00 ELECTION AND TERM OF OFFICE. Delegates and alternate delegates shall be elected in November or December by component societies. Certification of delegates and alternate delegates shall commence on January 15 following their election by component societies, and shall continue in effect for a period of one year.

Chapter VI deals with the election of officers and trustees. Almost every section of this chapter needs to be amended. The following are the rewritten sections with the new language underlined and old language stricken.

Section 1.00 OFFICERS AND TRUSTEES. The general officers of the Association shall be the president, president-elect, immediate past-president, vice-president, secretary-treasurer, speaker of the House of Delegates, *vice-speaker of the House of Delegates*, chairman and *vice-chairman of the Board of Trustees*. The composition of the Board of Trustees is defined in Chapter V, Section 1.00 of these Bylaws.

Section 2.00 ELECTORATE. The House of Delegates shall *serve as the electors of* the general officers, *except the offices of chairman and vice-chairman of the Board of Trustees*, and the trustees and alternate trustees of the Association at the annual meeting.

Section 3.00 and *Section 4.00* remain unchanged.

Section 5.00 NOMINATIONS. Candidates for general officer positions, *except the offices of chairman and vice-chairman of the Board*, may

be nominated by any member of the House of Delegates. Candidates for trustee or alternate trustee must be nominated by a delegate from their trustee districts, as provided in Chapter V, Sections 1.00 and 2.00 of these Bylaws.

Section 6.00 remains unchanged.

Section 7.00 ELECTION. General officers, *except chairman and vice-chairman of the Board*, and trustees and alternate trustees shall be elected in the closing session of the annual meeting of the House of Delegates.

Section 8.00 remains unchanged.

Section 9.00 GENERAL OFFICER VACANCIES. Vacancies in any general office, except president, president-elect, *chairman or vice-chairman of the Board*, and speaker of the House of Delegates, shall be filled by appointment of the president, with the approval of the Board of Trustees, effective until the next annual meeting, at which time the House of Delegates shall elect a successor to either begin a new term or to complete the unexpired term. A vacancy in the office of president shall be filled automatically by the vice-president. *A vacancy in the office of chairman of the Board shall be filled automatically by the vice-chairman and a new vice-chairman shall be elected by the Board*, and a vacancy in the office of speaker of the House of Delegates shall be filled automatically by the vice-speaker. If the office of president-elect becomes vacant, the president shall immediately call a special session of the House of Delegates for the purpose of filling the vacancy by election.

Section 10.00 remains unchanged.

Chapter X, Section 3.00, should be amended as follows:

Section 3.00 EXECUTIVE COMMITTEE. The Executive Committee shall consist of the general officers of the Association as defined in *Constitution Article VIII, Sections 1 and 2*.

2. CHAIRMAN OF THE BOARD

There is one inconsistency in the Bylaws in regard to the chairman of the Board of Trustees. A literal reading of the Bylaws would indicate that the chairman of the Board of Trustees could actually be elected and serve as chairman beyond the time that he is an elected trustee. The following amendment to Chapter V, Section 5.02, of the Bylaws is recommended to correct this oversight:

5.02 PRESIDING OFFICER. The presiding officer of the Board of Trustees shall be the chairman of the Board, who is elected by the Board from among its own members at its an-

nual meeting. The term of office of the chairman is one year, and he is limited to three consecutive terms in this position. A vice-chairman shall be elected by the Board from among its own members to serve concurrently with the chairman and according to the same limitation of tenure. The vice-chairman shall preside in the absence of the chairman of the Board. *Neither the chairman nor the vice-chairman may be elected to a term of office that will extend beyond their tenure as an elected trustee.* The president of the Association is ineligible for election to either office.

3. MEDICAL SCHOOL REFERENCES

There are several references to the "University of Oklahoma College of Medicine" in the Bylaws. These should be changed to reflect the status of the Tulsa branch of the College of Medicine, and, possibly, the new Oral Roberts University School of Medicine.

Chapter I, Section 2.08, is amended to read as follows:

2.08 STUDENT MEMBERS. Persons serving as full-time medical students in *an educational institution approved by the Board of Trustees*, upon application of a component society, may become student members of the component society and of this Association. Membership in this classification is limited to the period of training *in medical school*.

Chapter IV, Section 1.00, is amended as follows:

1.00 COMPOSITION. The House of Delegates shall be comprised of the general officers of the Association, delegates and alternate delegates to the American Medical Association, trustees and alternate trustees, delegates elected by the component societies, and two non-voting delegates to be elected by *each American Medical Student Association Chapter located in an educational institution approved by the Board of Trustees*.

Sections 1.01-1.03 remain unchanged.

Section 1.04 AMSA REPRESENTATION. The two delegates from *each AMSA Chapter in an educational institution approved by the Board of Trustees* shall be allowed full privileges of the House of Delegates, except voting, notwithstanding Section 1.01 above.

Chapter IX, Section 9.02, specifies the composition of the Association's Council on Scientific Assembly. This section is amended as follows:

9.02 APPOINTMENT. *This council shall consist of three members appointed annually by the president. He shall designate one of the three as chairman of the council. In addition, each medical specialty organization recognized by the American Medical Association shall be entitled to one representative on the council for each 100 members or part thereof in the state of Oklahoma. The Dean of each educational institution approved by the Board of Trustees shall be entitled to designate one person to serve on the council.*

The chairman of the Association's Council on Medical Education shall automatically be a member of this council.

Chapter X specifies composition and duties of various Association committees. Section 5.01 outlines the duties of the Association's Financial Aid to Education Committee. This section is amended as follows:

5.01 DUTIES. The committee shall be responsible for management of the Association's loan and scholarship funds for students of *educational institutions approved by the Board of Trustees*. In addition, the members of this committee shall also serve as the Board of Directors of the Oklahoma State Medical Association Loan and Scholarship Fund, Incorporated.

4. ASSESSMENTS

Chapter II of the Bylaws deals with the collection of dues and assessments. One of the provisions under the general heading of "assessments" specifies that assessments are not refundable. Recently, the Association's Board, in conjunction with the PLICO Board, ruled that the Special Assessment for the Capitalization of the PLICO Insurance Company could be refunded on the same basis as the premium. The following amendment should be made to Section 3.05 of Chapter II:

3.05 REFUNDS. *Assessments may be refunded as determined by the Board of Trustees.*

Section 1.031 of Chapter II needs a minor amendment in order to eliminate any inconsistencies with Section 3.00. The amendment is as follows:

1.031 COMPLETE EXEMPTION. The following classifications of members shall be completely exempted from payment of dues and/or assessments, *as determined by the House of Delegates*: (The remainder of this section is unchanged.)

Section 1.032 of Chapter II outlines the

specifications for partial exemption of dues and/or assessments. This entire section needs to be reworded in order to bring it into compliance with Section 3.00 on assessments and to make it grammatically correct. The following amendments are recommended:

1.032 PARTIAL EXEMPTION. The following classifications of members shall be partially exempted from payment of dues and/or assessments according to the terms prescribed: (a) Physicians who have been engaged in the practice of medicine less than one year since the completion of *intern/resident* training may, at the election of the component society, be assessed one-half the amount of regular dues and/or assessments for their first year of Association membership: (b) Upon the judgment of the component society, and with the approval of the Board of Trustees, physicians with financial or other sufficient reasons, may be assessed one-half of the amount of regular dues and/or assessments: (c) Affiliate and corresponding members shall be required to pay partial dues in an amount to be specified by the Board of Trustees. *Members exempted under (a) or (b), above, shall have full rights and privileges of Association membership.*

5. MEDICAL MEETINGS

There appears to be an inconsistency in Chapter IX of the Bylaws between Sections 7.00 and 9.00. Section 7.00 creates the Council on Medical Education while Section 9.00 establishes the Council on Scientific Assembly. However, Section 7.012 is labeled "Scientific Assembly," but refers to the right of the Council on Medical Education to work with other medical or allied health organizations in arranging medical meetings.

A reading of the Bylaws clearly indicates that the Council on Scientific Assembly is to direct the Association's Annual Meeting and other Association-sponsored meetings, while the Council on Medical Education can work with outside organizations to jointly sponsor meetings.

In order to clear up any possible confusion, it is recommended that Section 7.012 be amended as follows:

7.012 JOINT MEDICAL MEETINGS. (The remainder of the section will be unchanged.)

6. MEMBERSHIP DUES

Chapters I and II of the Bylaws are redundant in that membership dues for the various

types of memberships are listed twice. Chapter I deals with the classifications of memberships, while Chapter II deals with dues. It is recommended that specific statements regarding dues be eliminated throughout Chapter I so that the appropriate Chapter II, will be controlling. The following amendments are recommended to the sections in Chapter I:

2.032 RIGHTS. Life members who reside in the state of Oklahoma shall have the full rights and privileges of Association membership, including the rights to vote and hold office.

2.041 RIGHTS. Affiliate members shall be entitled to all of the privileges of membership, except voting and holding office.

2.051 RIGHTS. Junior members shall be entitled to all the privileges of membership, except voting and holding office.

2.061 RIGHTS. Honorary members shall be entitled to all the privileges of membership, except voting and holding office. However, they shall not receive any publication of the Association, except by subscription.

2.071 RIGHTS. Corresponding members shall be entitled to all the privileges of membership, except voting and holding office.

2.081 RIGHTS. Students members shall be entitled to all the privileges of membership, except voting and holding office, except as otherwise provided in these Bylaws.

Chapter II is amended by adding a new subsection to specify the dues situation for junior, affiliate, and corresponding members, as follows:

1.034 SPECIAL EXEMPTIONS. *Those persons designated as student affiliate, junior, or corresponding members may be required to pay partial dues and/or assessments in an amount to be specified by the Board of Trustees.*

7. BOARD OF TRUSTEES

The following recommended amendments to the Bylaws are designed to eliminate a possible inequity in trustee positions.

Article VI, Board of Trustees, of the Constitution is amended to read as follows:

Section 1. The Board of Trustees shall consist of: (1) The general officers of the Association; and (2) Trustees to be elected from each of the 14 trustee districts. *Each district shall be entitled to one trustee for every 500 physician-members or fraction thereof.* The Board will elect its own chairman and vice-chairman as provided in the Bylaws.

Chapter V, *Board of Trustees*, of the Bylaws is amended to read as follows:

Section 1.00 COMPOSITION. The Board of Trustees is composed of the Association's general officers and trustees to be elected from each of the 14 authorized trustee districts. *Each district shall be entitled to one trustee for every 500 physician-members or fraction thereof.* In computing the physician population of each trustee district, only active, active dues-exempt and life members shall be counted. (The remainder of this section remains unchanged.)

8. OSMA PAST-PRESIDENTS

It is recognized that physicians who have served as president of the OSMA are possessed of a unique knowledge and outlook regarding the Association's purposes and functions. This resource should be made available to the Association by providing that OSMA past-presidents should serve as members-at-large of the Association's House of Delegates and participate in all its deliberations.

Article V, House of Delegates, of the Constitution is amended by adding a new section, as follows:

Section 4. All past-presidents of the Association shall be members-at-large of the House of Delegates.

Chapter IV, House of Delegates, of the Bylaws is amended by adding the following section:

1.05 OSMA PAST-PRESIDENTS. As provided in Article V, Section 4, all OSMA past-presidents shall be members-at-large of the House of Delegates, notwithstanding Section 1.00 above. Provided, however, that the Past Presidents shall not be included in the quorum list for the delegates.

9. DETERMINATION OF REPRESENTATION

The OSMA Bylaws do not specify the date for an official head count of its members in order to determine trustee representation. The following section is added to Chapter V, *Board of Trustees*, of the Bylaws:

2.01 DETERMINATION OF REPRESENTATION. The determination of the number of trustees to be elected from each of the 14 au-

thorized trustee districts shall be had by computing the number of physician members residing in each trustee district on December 31 of the year preceding the Annual Meeting at which the delegates elect the trustees from the various trustee districts.

10. MISCELLANEOUS

The following recommended amendments to the Bylaws are designed to clarify or clear up inconsistencies.

Chapter I, Section 4.01, is amended to read as follows:

4.01 TRANSFER. Should a member move his *predominant medical practice* to the jurisdiction of another component society, he shall apply for a continuation of his membership through the new jurisdiction, as provided in Chapter XI.

Chapter IV, Section 4.21, is amended as follows:

4.21 CREDENTIALS. The Executive Director shall certify to the *credentials* committee a list of delegates, alternate delegates, *general officers, past-presidents and AMA delegates and alternate delegates.*

Chapter V, Section 7.07 and 7.08 specify the creation of the Editorial Board of the Journal and authorize the Journal's publication. These same sections are already found in Chapter VIII of the Bylaws. Therefore, it is recommended that Chapter V be amended by eliminating Section 7.07 and 7.08 and renumbering Section 7.09 to 7.07.

Chapter IX details the various councils of the Association. Section 1.02 specifies the appointment of council members. Since all councils are not appointed the same, this section should be amended as follows:

1.02 APPOINTMENTS. Unless otherwise specified in these Bylaws, the president shall appoint all members of the councils of the Association on an annual basis and the number of members to appoint to each council shall be determined on an "as needed" basis.

11. BYLAWS COMMITTEE RECOMMENDATION

It is the recommendation of the Bylaws Committee that the House of Delegates adopt the above recommended amendments and modifications to the Constitution and Bylaws of the Oklahoma State Medical Association.

Resolution: 1
(WITHDRAWN)

Resolution: 2
(REFERRED TO THE COUNCIL ON PUBLIC AND MENTAL HEALTH FOR FURTHER STUDY AND CLARIFICATION)

INTRODUCED BY: Council on Public and Mental Health
SUBJECT: Physical Education
REFERRED TO: Reference Committee I

WHEREAS, The lack of physical fitness among the nation's work force results in an alarming waste of human and financial resources; and

WHEREAS, Substantial evidence supports the belief that serious, chronic health problems, such as heart disease and low back disabilities, begin in childhood and adolescence; and

WHEREAS, Studies have shown that a relationship exists between quality physical education and the physical activity habits of adults; therefore be it

RESOLVED, That the Oklahoma Medical Association strongly urge all school districts to require daily physical education for all children and youth for grades K-12. In addition, the Association recommends that schools emphasize the following areas in physical education:

Identification of the physically underdeveloped pupil and provision for appropriate, progressive, developmental physical activities to correct this condition.

The attainment of an optimal level of physical fitness by all pupils.

Resolution: 3
(APPROVED)

INTRODUCED BY: Council on Medical Services
SUBJECT: Reinstatement of AMA Committee on Medical Aspects of Sports
REFERRED TO: Reference Committee I

WHEREAS, The American Medical Association had a viable Committee on Medical Aspects of Sports until it was abolished on January 1, 1977; and

WHEREAS, Millions of Americans are now taking part in exercise and sports programs which unfortunately lead to a higher incidence of injuries; and

WHEREAS, An increasing number of law-

suits involving sports injuries are now pending in the courts and threaten to have a pronounced effect on the sports activities of our schools and citizens; and

WHEREAS, These cases can only have an increasing effect on the physicians who treat these patients; therefore be it

RESOLVED, That the House of Delegates of the American Medical Association hereby requests that due to the increasing importance of sports in our society and to the increasing number of sports-related injuries and lawsuits, the AMA Committee on the Medical Aspects of Sports be reinstituted.

FISCAL NOTE: \$15,000 travel and support for a five-person committee meeting quarterly.

Resolution: 4
(APPROVED)

INTRODUCED BY: Central Oklahoma Pediatrics Society and The Oklahoma City Obstetrical and Gynecological Society
SUBJECT: Prevention of Pregnancy Among Adolescents

REFERRED TO: Reference Committee I

WHEREAS, Unwanted pregnancy among teenage girls in Oklahoma has emerged as the leading health problem in this age group today; and

WHEREAS, Live births to girls less than 15 years of age in Oklahoma is increasing at a rate five times the national average; and

WHEREAS, Oklahoma taxpayers pay as much as 68 million dollars annually for support of teenage mothers and their babies; and

WHEREAS, The effect of the unwanted pregnancy is frequently and permanently devastating to the young mother, her baby, the extended family, and society as a whole; and

WHEREAS, Pregnancy is preventable; therefore be it

RESOLVED, That the Oklahoma State Medical Association will actively support the development of health and family life curricula in the public schools of Oklahoma, which will emphasize the importance of conception of life within the framework of a stable family unit and the profound responsibilities of parenthood; and be it further

RESOLVED, That the Oklahoma State Medical Association will actively seek new legislation which will free the physicians of Oklahoma to provide methods of prevention of pregnancy to teenagers at risk in accordance with their best medical judgment.

Resolution: 5
(NOT APPROVED)

INTRODUCED BY: Council on Public and Mental Health

SUBJECT: Oklahoma's Emergency Communications System

REFERRED TO: Reference Committee II

WHEREAS, Coordination of communications is essential for the most effective utilization of public services in emergency situations as well as on a day-to-day basis; and

WHEREAS, The present communications systems available to Oklahoma public agencies are fragmented and do not permit optimal functioning of public agencies in fulfilling their responsibilities of serving the people of this state; therefore be it

RESOLVED, That the Council on Public and Mental Health of the Oklahoma State Medical Association urges the development of an effective, coordinated communications system for utilization by appropriate state entities; and be it further

RESOLVED, That the Council on Public and Mental Health further endorses and supports the efforts of the Oklahoma Department of Public Safety in developing the basis for a statewide communications system which would permit coordination of communications among the multiple state agencies.

Resolution: 6
(APPROVED)

INTRODUCED BY: Council on Planning and Development

SUBJECT: OSMA Continuing Medical Education Requirement

REFERRED TO: Reference Committee II

WHEREAS, The OSMA House of Delegates passed a resolution in 1975 requiring the AMA Physician Recognition Award as a condition of membership in OSMA; and

WHEREAS, In 1975, at the time of the House of Delegates action, there was only one nationally recognized accrediting agency for continuing medical education — the Liaison Committee on Continuing Medical Education; and

WHEREAS, There are now two nationally recognized agencies accrediting continuing medical education — the LCCME and the AMA; and

WHEREAS, These duplicative accrediting bodies create confusion and concern in implementing the House of Delegates policy; therefore be it

RESOLVED, The House of Delegates hereby suspends the AMA PRA requirement for membership in OSMA, and also the referendum previously authorized, pending further study by appropriate committees of the Association; and be it further

RESOLVED, That all members of OSMA are hereby encouraged to continue pursuits of appropriate medical education by accumulating a minimum of 150 CME credits each three years.

Resolution: 7
(APPROVED AS AMENDED)

INTRODUCED BY: Leroy C. Mims, MD

SUBJECT: JCAH Ruling on CPR Training

REFERRED TO: Reference Committee II

WHEREAS, The Joint Commission on Accreditation of Hospitals (JCAH) has recently ruled that all physician staff members of accredited hospitals must be qualified (certified) in cardiopulmonary resuscitation (CPR); and

WHEREAS, This requirement will be requisite to staff privileges since hospitals must be in compliance with the requirements of the JCAH; and

WHEREAS, The JCAH has overstepped its bounds of authority by issuing such a requirement and has now entered into a trend of governing physicians' credentials, a task heretofore considered solely a function of the physicians' staff; and

WHEREAS, If such authority is allowed to go unchecked, a dangerous trend will develop and there will be nothing to stop the imposition of other arbitrary training courses; and

WHEREAS, Hospitals will then totally control physicians regardless of their training credentials under aegis of compliance by the JCAH; and

WHEREAS, This is clearly a situation where an arbitrarily chosen group of advisors (JCAH) paid for by hospitals and other medical groups who have special interests will control the credential requirements of staff members at all levels; therefore be it

RESOLVED, That the House of Delegates encourages OSMA members to protest the JCAH ruling through their local county medical societies; and be it further

RESOLVED, That the House of Delegates recommends that OSMA members not participate in any formal training session imposed on physicians other than those required by the Medical Practice Act of the State of Oklahoma, hospital medical staffs, and by specialty training boards; and be it further

RESOLVED, That the House of Delegates recommend that OSMA members voluntarily seek competency in cardiopulmonary resuscitation.

Resolution: 8
(NOT APPROVED)

INTRODUCED BY: The Cookson Hills Medical Society
SUBJECT: Compulsory American Medical Association Membership
REFERRED TO: Reference Committee III

WHEREAS, It should be the right of any individual to select the organizations (whether political, professional, charitable, or civic) he will support financially; and

WHEREAS, There is reason to believe that some members of the Oklahoma State Medical Association object to the requirement that all members of the Association must be active members of the American Medical Association; and

WHEREAS, This requirement is preventing some Oklahoma physicians from participating in their local medical societies and their state association for financial or other reasons and is thereby causing them to lose the benefits of educational and social communication with fellow physicians; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association designate a committee to conduct a poll of the members of the Association in the following or similar manner and to publish the results of that poll at least three months prior to the 1981 meeting of the Oklahoma State Medical Association House of Delegates in *The Journal of the Oklahoma State Medical Association*:

Do you support the bylaw provision of the Oklahoma State Medical Association requiring American Medical Association membership as a prerequisite for membership in the Association?

yes_____ no_____

Do you favor repeal of this provision?

yes_____ no_____

Do you know of physicians in your com-

munity who are not members of their local medical society because of this restriction?

yes_____ no_____

Resolution: 9
(APPROVED)

INTRODUCED BY: Council on Members Services

SUBJECT: Hospital Medical Staff Quality Assurance Activities

REFERRED TO: Reference Committee I

WHEREAS, The medical profession has long recognized that the promotion of quality education, constructive peer review, and a lifetime of learning are necessary responsibilities to be borne by all physicians desiring to keep pace with an expanding bank of scientific knowledge; and

WHEREAS, These efforts have produced a profession whose calling and whose skill in the applied science of patient care have earned the public's utmost respect among all learned professions and occupations; and

WHEREAS, The profession's devotion to excellence has been and remains responsive to the public's expectations as to the quality of care ultimately delivered to the sick and injured; and

WHEREAS, The most significant delivery point for applied science is within the hospital setting — in institutions made available to physicians and to patients through public and private funds; and

WHEREAS, New modalities are evolving whereby physicians may monitor and regulate their performance through improved hospital staff peer review measures, and whereby new opportunities exist to voluntarily engage in activities which hold promise of even higher yields on behalf of patient safety through objective, systemized quality assurance efforts; and

WHEREAS, The Oklahoma State Medical Association recognizes that the hospital professional staff represents the ultimate element of organizational medicine wherein the profession can demonstrate its commitment to the highest of professional standards; therefore be it

RESOLVED, That the Oklahoma State Medical Association calls upon all physicians, all component societies, and all hospital professional staffs to bolster their commitment to the

quality assurance opportunity which avails itself through the organized hospital professional staff; and be it further

RESOLVED, That such renewed or expanded internal review measures by hospital professional staffs be coordinated with other risk management efforts as may be actuated by hospital administration officials or hospital trustees toward the common goal of improving the quality of care throughout the institution via its variety of interdepartmental professional, ancillary and other support services; and be it further

RESOLVED, That copies of this resolution be distributed to all component professional societies, to all hospital administrators, and to all Chiefs of Staff and Chairmen of Boards or licensed hospitals in the State of Oklahoma.

Resolution: 10

(APPROVED AS AMENDED)

INTRODUCED BY: Tulsa County Medical Society

SUBJECT: Publication of Medical Laws of Oklahoma, Rules and Regulations of the Oklahoma State Board of Medical Examiners

REFERRED TO: Reference Committee III

WHEREAS, The Oklahoma State Board of Medical Examiners has discontinued publication of the Medical Laws of Oklahoma and Board Rules and Regulations, no edition having appeared for several years; and

WHEREAS, This collection of statutory medical law of Oklahoma and significant information about medical licensure in Oklahoma is of immense practical value, not only to established physicians but to physicians entering practice in Oklahoma for the first time; therefore be it

RESOLVED, That Oklahoma State Medical Association publish as soon as possible an updated compendium of Oklahoma medical laws, including rules and regulations of the Oklahoma State Board of Medical Examiners, in the OSMA Directory and that it be revised bi-annually for distribution to OSMA members; and be it further

RESOLVED, That Oklahoma State Medical Association seek the cooperation and assistance of the Oklahoma State Board of Medical Examiners in collecting appropriate material for this project.

Resolution: 11
(NOT APPROVED)

INTRODUCED BY: Okfuskee County Medical Society

SUBJECT: Quarterly Payment of OSMA Dues
REFERRED TO: Reference Committee III

WHEREAS, Dues for membership in the Oklahoma State Medical Association are now paid generally once a year; and

WHEREAS, Dues for this and other organizations have increased to astronomical heights within the past ten years; and

WHEREAS, We all have excessive first-of-the-year expenses, including malpractice insurance, professional dues, taxes and other assessments; therefore be it

RESOLVED, That OSMA members be given the option of paying dues on a quarterly basis; and be it further

RESOLVED, That necessary amendments to the OSMA bylaws be instituted.

Resolution: 12
(NOT APPROVED)

INTRODUCED BY: Okfuskee County Medical Society

SUBJECT: Quarterly Payments of Premiums to the Physicians Liability Insurance Company

REFERRED TO: Reference Committee III

WHEREAS, Premiums for a professional liability insurance company are now paid to the Physicians Liability Insurance Company in one installment; and

WHEREAS, The cost of professional liability insurance has risen remarkably during the past few years; and

WHEREAS, Each of us has excessive first-of-the-year expenses such as professional dues, taxes, assessments, and professional liability insurance; therefore be it

RESOLVED, That OSMA members be allowed to pay their professional liability insurance premiums to PLICO in quarterly installments.

Resolution: 13
(APPROVED AS AMENDED)

INTRODUCED BY: Okfuskee Medical Society

SUBJECT: Prescription Monitoring
REFERRED TO: Reference Committee II

WHEREAS, Many prescription medications,

unless properly monitored, present a health hazard to the public; and

WHEREAS, Refilling of non-current prescriptions present not only a problem to the physician but also a very real health hazard to the patient; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby instructs the Association's President to appoint an Ad Hoc Committee for liaison with the Oklahoma Pharmaceutical Association. Said Committee is to consist of a number of physicians to be established by the Association's President. In addition, the President should seek to have a like number of members appointed to a similar committee by the President of the Oklahoma Pharmaceutical Association. The job of the joint committee will be to resolve conflicts between physicians and pharmacists; and be it further

RESOLVED, That the joint committee specifically address the problem of monitoring prescriptions for potentially hazardous drugs such as diuretics, beta blockers, cardiac glycosides, antiarthritic medications, steroids and antibiotics.

Late Resolution: 14
(NOT APPROVED)

INTRODUCED BY: Kingfisher County Medical Society

SUBJECT: Support for Programs for the Mentally Retarded

REFERRED TO: Reference Committee II

WHEREAS, A majority of the mentally retarded adults of the State of Oklahoma have no formal continued training or vocational experiences available to them after leaving the state residential schools for the retarded nor after completing special education classes in the public school systems; and

WHEREAS, Productive vocational activities would provide at least partial financial independence and significant self-satisfaction for the retarded; and

WHEREAS, A large percentage of the retarded require skilled nursing care because of associated physical handicaps or medical disability; therefore be it

RESOLVED, That the Oklahoma State Medical Association endorse and support The Center of Family Love, a totally non-discriminatory residential facility providing

education and training for the adult retarded to be built in Okarche, Oklahoma, under the sponsorship of the Knights of Columbus Foundation of Oklahoma.

Late Resolution: 15
(APPROVED AS AMENDED)

INTRODUCED BY: Board of Trustees

SUBJECT: 1981 Dues

REFERRED TO: Reference Committee III

WHEREAS, The Constitution and Bylaws of the Association require that the House of Delegates shall levy such dues and assessments as it considers proper for the conduct of the business of the Association; therefore be it

RESOLVED, That the dues for 1981 shall be:

Active Members	\$180
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Junior Members	90
----------------	----

(Residents)

Life Members	-0-
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Honorary Members	-0-
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Dues for the following membership classifications are set by the Board of Trustees:

Affiliate Members

Corresponding Members

Student Members

Late Resolution: 16
(APPROVED AS AMENDED)

INTRODUCED BY: OSMA Executive Committee

SUBJECT: Student Membership Dues

REFERRED TO: Reference Committee III

WHEREAS, The Oklahoma State Medical Association is actively recruiting student members; and

WHEREAS, OSMA does not currently assess dues to student members; and

WHEREAS, It is desirable for student OSMA members to receive *The Journal of the Oklahoma State Medical Association*; and

WHEREAS, A possible financial hardship could result if the Association provides its JOURNAL to student members without cost and without assessing dues; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby empowers the Board of Trustees with the authority to establish suitable dues for student members.

Late Resolution: 17
(APPROVED)

INTRODUCED BY: George Kamp, MD
SUBJECT: Expression of Appreciation to S. N. Stone, MD
REFERRED TO:

WHEREAS, Samuel Newton Stone, MD, has served faithfully and diligently as Speaker of this House of Delegates for many years; and

WHEREAS, The members of this House as

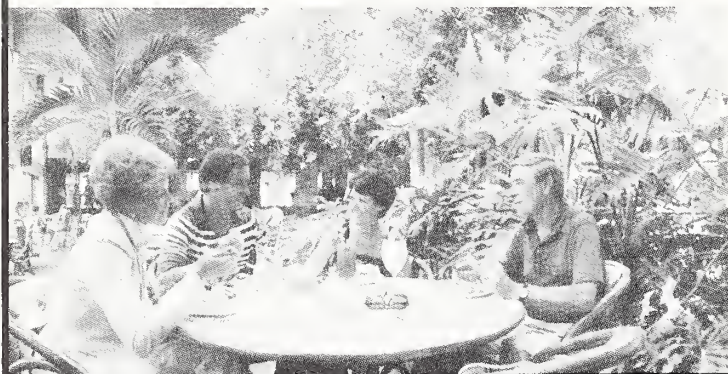
well as all OSMA members are indebted to Doctor Stone for his wise and prudent leadership; and

WHEREAS, Doctor Stone has decided not to seek re-election as Speaker of the OSMA House of Delegates; and

WHEREAS, This House could never adequately repay Doctor Stone but wishes in some way to show its gratitude; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby formally expresses to Doctor Stone its most sincere appreciation and best wishes.

1981 OSMA ANNUAL MEETING



Plan **NOW** To Meet Your Friends
At Beautiful

SHANGRI-LA LODGE

On Grand Lake Afton, OK

MAY 7 - 10, 1981



Amen

I hope that I am not alone in mourning the passing of eloquence. I hope that I am joined by thousands of my colleagues whose devotion reaches back through centuries to touch the soul of Hippocrates. The traditional oath of the physician, named in honor of the father of our profession has undergone an American revision, a depreciation. In fact, the classical and eloquent solemnities of the oath of Hippocrates have been declared obsolete. They have been replaced by a series of pedestrian promises called a Code of Ethics, a vapid enunciation of legalistic proscriptions.

Surely there are explanations which have been fabricated to justify this inanity, but I prefer to be spared them. I would as happily listen to an explanation of why Michelangelo's *David* should be chiseled down to more perfect proportions — and as readily endorse such foolishness.

Now we can await, ebulliently, a similar revision and modernization of The Gettysburg Address, The Merchant of Venice and other such obsolete scribblings from history. Possibly next in line to attract the attentions of our reconstructionists is the Bible. Just in case you can't wait for this magnificent achievement, here is a sample of what you can expect to read in such a revision:

The Divine being is my guardian; I

shall have no unmet needs. He requires that I assume the horizontal position in a portion of land which provides green food for livestock; He leads me along the edge of water which is undisturbed.

He tranquilizes my psyche; He makes certain that I can distinguish right from wrong and that I will do right in order not to cause Him embarrassment.

Notwithstanding the fact that I occasionally expose myself to mortal danger, I will not be intimidated by alien influences; knowing that You will provide my protection through the exercise of due process.

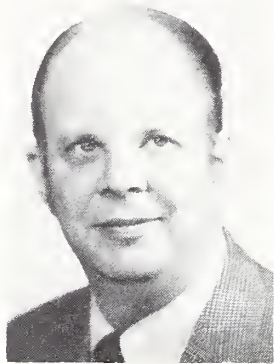
You secure a facility for my nourishment in spite of a hostile environment; You apply unsaturated fats to my scalp; my cup is overfilled.

I rest assured that equal rights and equal opportunities will be available to me throughout my life; and I will occupy the condominium of the Divine being forever.

And just in case you don't recognize this magnificence, it is a modernized version of the 23rd Psalm. Of course it's not eloquent, but it's contemporary and meaningful in today's society.

Let us all bow our heads. It is a time for mourning. Amen. MRJ

Three years is a long time, and a lot can take place, especially when continuing medical education is involved. I know this is true because in Oklahoma our continuing medical education program has experienced some major changes during that period.



In April, 1976, the Oklahoma State Medical Association's House of Delegates unanimously approved a resolution calling for the development of a continuing medical education program in this state. The task of developing this program was assigned to the OSMA Council on Medical Education, and the Council was directed to report back the following year. In May, 1977, a program based upon the American Medical Association's Physician Recognition Award was presented to the House. This program, which dictated that each OSMA member must have an active AMA PRA Award, was unanimously approved for implementation on January 1, 1978. Now, three years later, the OSMA House of Delegates has unanimously approved a resolution suspending the CME requirement for membership. What could have happened during those three years to completely alter 170 delegates' attitudes on continuing medical education?

Since I served as chairman of the Council on Medical Education during the formative years of our CME program, I can say with some certainty that there has never been a lack of support for CME in this state. During all of our original deliberations, not one delegate spoke in opposition to continuing medical education. Likewise, every vote we took was unanimous.

And yet in three years attitudes regarding our CME program changed dramatically. In my opinion there is just as much support for continuing medical education now as there was in 1976. We are, however, less willing to impose more rules, regulations and directives upon ourselves.

Most of us would probably admit that the real push for mandatory continuing medical education in this country came as a result of threats, however indirect or subtle they may have been, from the federal government and our state legislatures. Rather than having mandatory continuing medical education imposed upon us, we reasoned somehow that it would be better to impose it upon ourselves. Now, three years later, our thinking in Oklahoma has come full circle.

We no longer want CME dictated to us. We no longer feel that it is better to do it to ourselves than to have someone else do it to us. But that is not to say that our program has been without its benefits.

During the past three years we have promoted continuing medical education, and I believe most doctors in this state now better realize its importance. We have worked with most of the state's larger hospitals, and they are now accredited to conduct Category I continuing medical education courses. Everyone is now familiar with the AMA PRA, and frankly I think we are better off because of it. CME has become established in Oklahoma, and I personally believe that it will survive and flourish even though it is no longer mandatory.

I personally support continuing medical education. I supported it three years ago, and I suspect that I will continue to support it in the future. I do not, however, consider the action by our House of Delegates to be counterproductive or contrary to my beliefs.

As doctors it is essential that we continue our education. By the same token, I think we are mature and responsible enough that we do not need CME to be forced upon us either from the outside or from within. Oklahoma has not turned its back on CME; we have simply realized that if it is to have any real effect it must be a program our members willingly and voluntarily participate in.

W. Lloyd J. Miller, MD

Seminar on Antibiotics II

The Basis of the Antibacterial Actions of Antibiotics

EVERETT R. RHOADES, MD

*The appropriate use of antimicrobials
depends upon knowledge of specific
intracellular activity, spectrum of microbes
affected, and pharmacologic activity
within the host.*

BACKGROUND

Competition between microorganisms was discovered in the 1870's very quickly after microorganisms were shown to be specific causes of disease. The term "antibiosis" was coined by Vuillemin, a pioneer in virus research, to describe this competition which sometimes was detrimental to microorganisms. The term "antibiotic" was proposed by Waksman in 1942 to identify specific substances produced by microorganisms that inhibited the growth of other microorganisms. The term, more correctly meaning "against life" is not as precise as it might be, a point

which led Hobart Reimann more recently to suggest the term "anti-microbic" to refer to compounds directed at microorganisms. Even though this is indeed a more precise term, there seems little movement away from the more entrenched term.

The story of Fleming's discovery of penicillin and its subsequent development by Chain, Florey and Abraham have forever changed the very nature of medical practice. This story is also a tribute to the enormous ability of American industry to rise to a challenge. In 1941 penicillin was an amorphous yellow material present in quantities sufficient to treat only two or three patients. In 1942 there was enough penicillin in the United States to treat less than 100 patients. In 1943, the United States produced enough penicillin to supply all the uses of the military services of the United States and all its allies. By 1950, two thousand billion units were produced in the United States each month.

Since that time a great number of antibiotics with widely differing antibacterial actions as well as varying pharmacologic properties have been identified. Information has proliferated so greatly that the average practitioner finds it difficult to make sound judgments based upon thorough knowledge of the pharmacologic and microbiologic effects of antibiotics.

THE ACTION OF ANTIBIOTICS ON BACTERIA

Many of the subcellular actions of antibiotics are now known and indeed the physician may direct an antibiotic not at just a disease, or even an organism, but at a specific molecular activity within a bacterium. A review of the molecular actions of antibiotics provides information that is helpful in understanding the basis of antimicrobial therapy and in planning antibiotic use.

There are three areas within a bacterial cell at which most common antibiotics work: 1) the cell wall, 2) the cell membrane, and 3) the ribosome.

THE CELL WALL:

A schematic diagram of a bacterium showing the major points of antibiotic action is illustrated in Figure 1. The bacterial cell wall, which maintains the integrity of the bacterium, is made up of two distinct layers. The outer or 80% layer is more prominent in gram-negative bacteria than in gram-positive ones. This outer layer influences the "binding" of certain antibiotics, and is responsible for the ability of some bacteria to prevent the absorption and penetration of certain antibiotics. The inner, or 20% layer, is rigid and maintains the shape of the bacterium. It is a *very* complicated latticework containing N-acetyl-muramic acid and glycoproteins held together, at least in

FIGURE 1

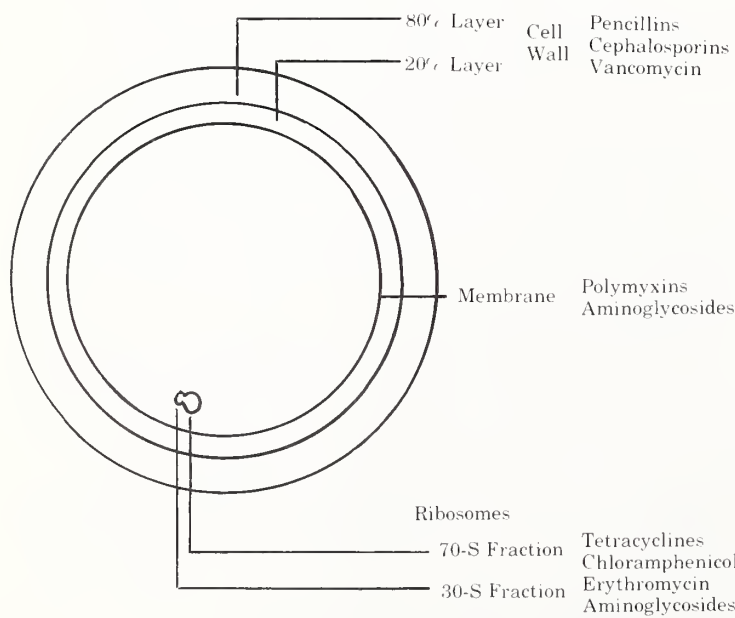


TABLE 1

Site of Major Activity of Antibiotics		
On Cell Wall	On Ribosome	On Membrane
Penicillins	Erythromycin	Polymyxins
Cephalosporins	Tetracyclines	Aminoglycosides
Vancomycin	Chloramphenicol	
	Aminoglycosides	

part, by bridging between certain amino acids.

Antibiotics that act upon the cell wall are characterized in general as follows:

1) They tend to be "cidal" in their action. This is explained, at least in part, by lysis of the organism which occurs after the cell wall is damaged. When this happens, the intracellular osmotic pressure causes the naked bacterium to rupture.

2) They tend to have a very wide therapeutic index. Since there is no counterpart to the cell wall in mammals, antibiotics acting on cell walls do not possess great toxicity for man. The exception is vancomycin which acts at a point on the inner area of the cell wall.

3) These antibiotics act only upon dividing cells. Thus, conditions which render the organisms dormant may decrease the effectiveness of cell-wall-acting antibiotics.

4) They are not effective against organisms with no, or already defective, cell walls such as Rickettsia and Mycoplasma. Examples of cell-wall acting antibiotics are shown in Table 1.

THE CELL MEMBRANE:

The cell membrane performs a variety of crucial functions such as maintaining correct ionic concentrations. It is a complicated structure, containing a large proportion of lipids, at which a variety of antibiotics act. Disruption of

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FIGURE 2
ANTIBIOTIC SENSITIVITY REPORT
THE UNIVERSITY HOSPITAL AND CLINICS
NOVEMBER 1978
Percentage of Isolates Susceptible

Organisms	Number of Isolates	Antibiotics tested	Ampicillin (AM)	Carbenicillin (Cb)	Cephalothin (Cr)	Chloramphenicol (C)	Clindamycin (CC)	Colistin (CL)	Erythromycin (E)	Gentamicin (Gm)	Kanamycin (K)	Lincomycin (L)	*Nitrofurantoin (Fd)	Oxacillin/Metnicillin (O/M)	Penicillin (P)	Polymixin B (Pb)	*Sulfas (G)	Tetracycline (T)	Tobramycin (Tob)	*Trimethoprim/sulfamethoxazole (SxT)
Enterobacter sp	15	13	87	7	100		100		100	100		100			100	100	100	100	100	
Escherichia coli	156	73	76	84	95		100		97	91		98			100	73	83	97	96	
Group D.																				
Streptococcus	14	100		29	100		7		64	71										
Klebsiella pneumoniae	59	3	3	97	93		97		95	95		93			97	63	95	95	90	
Proteus mirabilis	35	89	91	94	74				94	91		20				80		94	100	
Proteus sp	19		79		68				95	89		8				83	85	89	92	
Psuedomonas aeruginosa	44		89				100		93	95					100		6	93		
Serratia sp																				
Staphylococcus																				
aureus	100	7		100	100	100		96	99	100		100	7				90			

*Urine Only Distributed by the Infection Control Committee

the cell membrane may result in prompt death of the cell and antibiotics acting at this point are usually "bactericidal." However, perhaps because of similarities between bacterial and mammalian membranes, these antibiotics possess considerable toxicity for man and have a narrow therapeutic index.

THE RIBOSOME:

The ribosome provides for the manufacture of proteins. It "reads" information contained in messenger-RNA and sequentially attaches ac-

tivated amino acids together to build up polypeptides and proteins. Thus antibiotics acting at this important site interrupt the synthesis of proteins. Antibiotics acting at this point may "shut-off" cell division, thus antagonizing the action of antibiotics which act upon the cell wall. However, they do not seem to interfere with antibiotics acting on the cell membrane. Antibiotics shutting off protein synthesis obviously do not necessarily kill bacteria outright, hence these antibiotics are commonly thought of as "static" rather than "cidal." Finally, bacteria seem to be able to

adapt to the presence of antibiotics (or block their attachment) at the ribosome, permitting ready development of resistance to these antibiotics.

It should be noted that the aminoglycosides have more than one site of action. Several sites of action of course may be discovered for most of the antibiotics.

THE THREE MAJOR CONSIDERATIONS IN THE USE OF AN ANTIBIOTIC

In addition to the above information, there are only three major points of consideration in making sound judgments about the use of antibiotics:

1. *The Antibacterial Activity of the Antibiotics.*

The guide to this information comes from susceptibility of the organism to the desired antibiotic obtained from in-vitro testing. A variety of techniques are used employing either disc-diffusion tests, or with increasing frequency, minimum inhibitory concentration (MIC) tests using broth-dilution. This subject is much more complex than appreciated and the definition of a "susceptible" organism often arbitrary and subject to a variety of interpretations. The only way to be reasonably confident about information in one's own practice is to consult the microbiologist in charge of the testing procedure. Each laboratory performing even a modest volume of testing should periodically publish a summary of susceptible organisms. Such a summary is shown in Figure 2. Since organisms often vary considerably in susceptibility, a knowledge of the microflora in

one's own practice is very useful in making initial selection of drugs.

2. *The Groups of Bacteria that are Commonly Inhibited by a Given Antibiotic.*

This requires some basic knowledge of microbiology and the pathogenesis of infectious diseases. For example, we have already seen above that penicillins would not be expected to be effective against Rickettsiae. Another example is that *Pseudomonas*, being an obligate aerobe, is rarely found under anaerobic conditions. There are nearly a limitless number of other examples.

3. *The Pharmacology of the Antibiotic.*

This is what provides a basis for dosage regimens, routes of administration, precautions about toxicity, etc.

CONCLUSION

With the above information as a general introduction the physician is now in a better position to consider the use of specific antibiotics. This will follow in subsequent discussion of some of the most commonly used antibiotics, emphasizing some of the more recent developments. □

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Hemorrhagic Renal Angiomyolipoma: An Elusive Diagnosis

CASE REPORT

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Major, USAF (MC)

Acute hemorrhage, an uncommon presentation of a benign renal angiomyolipoma, required surgical intervention. This rare neoplasm, frequently associated with tuberous sclerosis, is usually asymptomatic.

Renal angiomyolipoma is an uncommon, benign neoplasm frequently associated with tuberous sclerosis. These tumors are usually identified incidentally in the asymptomatic patient but have rarely presented with acute retroperitoneal or intraperitoneal hemorrhage. A correct preoperative diagnosis is unlikely in such patients. The unusual presentation of a rare disease requiring surgical intervention prompts this case review of a patient with spontaneous bleeding from an angiomyolipoma of the kidney.

A 40-year-old Caucasian female presented with a 12-hour history of periumbilical and right lower quadrant abdominal pain, subjective fever, and nausea. There was no previous history of abdominal surgical intervention. A diagnosis of systemic lupus erythematosus had been made in this patient five months prior to admission, and she was taking three to five grams of acetylsalicylic acid daily to control arthritic symptoms. The patient denied any history of abdominal trauma. Physical examination revealed a temperature of 100.2°F with a blood pressure of 130/70, and a pulse rate of 90 per minute. There was abdominal tenderness, guarding, and fullness in the right lower quadrant along with a positive psoas sign. There were no abdominal bruits. Laboratory examination revealed WBC = 11,200 per cubic millimeter (89% segmented neutrophils), hemoglobin = 12 grams%, hematocrit = 37%, platelet count = 163,000 per cubic millimeter, normal urinalysis, serum glucose = 112 mgs%, BUN = 11 mgs%, Na = 139 meq/L, K = 4.3 meq/L, Cl = 108 meq/L, amylase = 64 somogyi units/L (normal 60-160 somogyi units/L, prothrombin time = 16 sec (control = 12.4 sec), partial thromboplastin time = 27.2 sec (control 30.5 sec). Radiographic studies demonstrated right lower lobe pulmonary atelectasis and a questionable mass in the right lower quadrant of the abdomen. The initial diagnosis was acute appendicitis. Through a right lower

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The views expressed herein are those of the author and do not necessarily reflect the views of the US Air Force or the Department of Defense.



Figure 1

Postoperative intravenous pyelogram demonstrating normally functioning left kidney.

quadrant Rockey-Davis incision a large right perinephric hematoma was discovered. A mid-line laparotomy incision was utilized to improve exposure. Vascular control of the right renal pedicle was obtained, and exploration of the right kidney revealed a large hemorrhagic tumor protruding from the inferior pole. The left kidney was normal to palpation. A right nephrectomy was performed. Seven units of whole blood and 10 units of fresh platelets were administered intraoperatively. The patient had an uneventful postoperative recovery with normal renal function. An intravenous pyelogram demonstrated a normal left kidney (Fig 1).

PATHOLOGIC REPORT

Gross examination of the excised right kidney revealed an encapsulated, hemorrhagic tumor protruding from the inferior pole of the kidney (Fig 2). The tumor measured 10 cm in diameter on cut section. The neoplasm had a rubbery consistency and was yellow in color, resembling normal adipose tissue. Histologic sections of the tumor (Fig 3) revealed mature lipocytes with interspersed proliferating vascular and smooth muscle tissue. Scattered hemosiderin deposits suggested previous hemorrhage into the neoplasm. Sections of

normal renal tissue revealed no evidence of lupus nephritis.

DISCUSSION

While this patient demonstrated no clinically detectable preoperative hemodynamic alterations as a result of hemorrhage from the renal tumor, the vascular nature of the lesion along with the possibility of salicylate induced alteration in the patient's hemostatic mechanisms necessitated multiple blood transfusions to maintain intraoperative hemodynamic stability. The effect of salicylate on platelet adhesiveness may have contributed to the onset of spontaneous hemorrhage from the renal neoplasm. Guided by this presumption fresh platelet transfusions were administered intraoperatively. The prolonged prothrombin time, while possibly contributing to the hemorrhagic diathesis, was not adequately explained in this patient.



Figure 2

Right kidney and ureter, hemorrhagic angiomyolipoma protrudes from the inferior pole of the kidney.

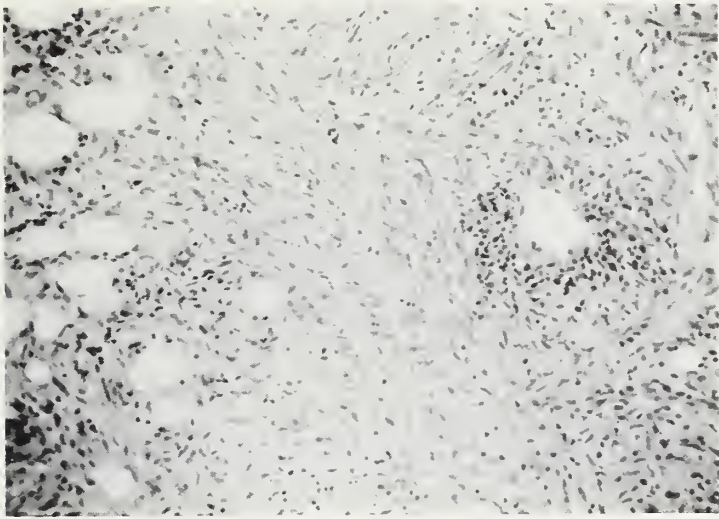


Figure 3

Microscopic section of renal angiomyolipoma demonstrating a) mature lipocytes, proliferating blood vessels, and smooth muscle cells, and b) hemosiderin pigment deposits.

Massive hemorrhage from a renal angiomyolipoma has been infrequently described. Recent reviews¹⁻³ have reported only nine cases of acutely hemorrhagic renal angiomyolipomata. A correct diagnosis was not made preoperatively in any of these cases. Patients have typically presented with abdominal or flank pain and shock. Physical and laboratory findings have included abdominal or flank masses, anemia, or hematuria. The preoperative diagnosis has included perforated hollow viscus, renal neoplasm, and acute appendicitis.

The symptoms as well as physical and laboratory findings in patients with retroperitoneal hemorrhage are often non-specific. The differential diagnosis includes tumors of solid organs such as kidney, pancreas, and adrenal; tumors of the great vessels; tumors of lymphatic, adipose, neural, or muscular origin unrelated to solid organs; ruptured

aortic or visceral arterial aneurysm; and spontaneous bleeding in patients with hemophilia.

Tissue conservation is an appropriate goal in the operative treatment of circumscribed benign renal neoplasms. The possibility of generalized lupus nephritis suggested the efficacy of partial nephrectomy in the patient described in this report. Furthermore, renal angiomyolipomata are frequently bilateral.¹ However, tumor size precluded a limited resection in this patient. Histologic examination of renal tissue not involved with the neoplastic process indicated no evidence of lupus nephritis. Direct palpation and intravenous pyelography demonstrated no contralateral renal abnormality.

The association of renal angiomyolipomata with tuberous sclerosis was reported as early as 1880¹ and has been subsequently documented in the literature.⁵ These tumors are frequently asymptomatic and identified incidentally in patients with tuberous sclerosis. Hematuria is not usually found.² Our patient manifested none of the signs or symptoms of tuberous sclerosis. No relationship between benign renal tumors and systemic lupus erythematosus has been established.

Renal angiomyolipomata are predominantly benign lesions. There are two reported cases of malignant angiomyolipomata^{6,7}, but according to Hajdu and associates there have been no reports of metastasizing or locally recurring tumors.⁵ Our patient showed no evidence of metastasis, and follow-up has demonstrated no recurrence of the primary neoplasm 14 months postoperatively.

SUMMARY

A patient with acute retroperitoneal hemorrhage from a renal angiomyolipoma is de-

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scribed. This rare neoplasm is frequently associated with tuberous sclerosis, is often bilateral, and is usually asymptomatic. Patients with tuberous sclerosis who present with flank pain, particularly when associated with hematuria or hemodynamic instability, should have hemorrhagic renal angiomyolipoma considered early in the differential diagnosis. However, acute hemorrhage from these benign tumors is an uncommon presentation, and a correct preoperative diagnosis is unlikely. □

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Minority Recruitment to the Health Professions: An Assessment of the COHS Program

JUDE THOMAS MAY, PhD

A report on a successful program for recruiting students from disadvantaged backgrounds to the biomedical professions.

A. Background and Introduction

In an article in the May, 1971 number of this *Journal*, Dr Joseph J. Ferretti reported on a new program at the University of Oklahoma Health Sciences Center (HSC) aimed at "acquainting high school students of racial minorities with health science research and the variety of career opportunities available in health care areas."¹ The program, Career Opportunities in the Health Sciences (COHS), sought to address the underrepresentation of minorities in the biomedical professions by recruiting high school students, gifted in the sciences, to a ten-week summer enrichment program.

The announcement was auspicious because the new program was unique in both focus and design. While earlier attempts in other univer-

sities had been primarily remedial and directed to college-level students, the COHS recruited high school-level students who were gifted in science and math. Moreover, while other programs emphasized didactic course work, the keystone of the new program was an intensive research experience in a biomedical laboratory, with each student working under the direct supervision of a faculty member.

Subsequent to that initial report, Dr Ferretti organized and directed a program in each of the following nine summers. The COHS has expanded in size during this period and a total of 188 students have participated. It is appropriate, therefore, that this second report should attempt to evaluate the effectiveness of the program relative to its defined goals. An historical summary of the growth of COHS will first be presented. This will be followed by a description of the 1979 program and the results of a preliminary evaluation.

It is important to recall that the COHS and programs of a similar nature were developed in a particular historical milieu. In the late 1960's, medical educators began to address the issue of minority representation in medical colleges and other health professional schools. The Association of American Medical Colleges assumed a leadership role in these efforts and in 1970 established a target goal of 12% minority students in medical schools by the year 1975. The COHS, and related programs, fit

into this broad goal by seeking to expand the pool of qualified minority applicants. It is instructive to note that Dr Ferretti's efforts at the Health Sciences Center predated by a full year the Congressional debate and passage of the Comprehensive Health Manpower Training Act of 1971 which created the Special Health Career Opportunity Grant Program at the federal level to deal specifically with this issue.

The first COHS effort in 1970 was limited in size (7 students) and resources (\$3,000); yet in content and direction, it contained the essential programmatic elements which were followed in later years. Applications were carefully screened on the following criteria; minority background; academic record and promise; financial need. The successful applicants were assigned to a research laboratory where each was expected to define and carry out a specific project under the direction of a faculty member. This experience was supplemented by lectures and tours which sought to introduce the student to career opportunities in the biomedical fields.

The COHS class was enlarged during the next nine years as additional financial support was generated. In 1972, the class included 16 students and the following year, 25 students were recruited. Since 1973, this approximate size has been maintained; there were 26 students in each class from 1977 to 1979. A total of 188 students have participated in COHS; 17 of these students have been invited to return for a second summer.

The COHS has received support from a variety of sources. During the period 1976-78, a grant from the Department of Health, Education and Welfare (Health Careers Opportunity Program, Bureau of Health Manpower) provided the basic support. Previously, the COHS had received small grants from the National Science Foundation (1973), the Bureau of Indian Affairs (1972-75), and private foundations.

The average cost per COHS student is approximately \$1,500 (based on figures for the 1977-79 programs). The major item in this total is board and room (\$700); each year approximately 80% of the students are recruited from outside the Oklahoma City metropolitan area. The stipend paid to each student (\$500) constitutes another significant part of the av-

erage cost. This scholarship is essential to the students in the program, who customarily use summer employment to earn support for the following school year. This average cost, \$1,500, is significantly below the average support level for similar summer programs throughout the country (\$1,900).²

The actual cost per student is significantly higher than \$1,500 (we estimate the actual cost per student for 1979 to be \$3,400) and the difference has been met by volunteered faculty time and donated resources. It is symbolic of the nature of the program and the support within the faculty, that none of the laboratory preceptors or lecturers received any financial remuneration for their efforts.

B. The COHS Program in 1979.

The current COHS program retains all of the essential elements of the original effort with some minor additions. It continues to be based on an intensive, enrichment program in the biomedical sciences, developed within the framework of a one-to-one teaching relationship between the COHS student and a senior faculty person. Applications are solicited throughout the State and region from high school students who have exhibited high achievement in science and math curricula. In 1979, approximately 77% of the 26 students were from Oklahoma, with the remainder coming primarily from New Mexico. Customarily, and by program design, Oklahoma students have comprised 90% of previous COHS classes.

The applications are reviewed carefully by an advisory committee composed of faculty members at the HSC, and personal interviews

Table 1
Racial/Ethnic Origin of Students by Year,
1970-79

Year	Black	Native American	Hispanic American	Other (includes Asian)	Total	Repeaters ¹
1970	6	1	—	—	7	—
1971	3	2	1	1	7	1
1972	4	9	1	2	16	—
1973	8	14	2	1	25	2
1974	9	16	—	—	25	4
1975	7	11	3	—	21	3
1976	14	10	—	1	25	1
1977	11	12	2	1	26	1
1978	7	14	4	2	27	2
1979	4	12	6	4	26	3
Total	73	101	19	12	205	17

¹Some students have been invited to return for a second summer.

are arranged for the finalists. The criteria for assessing the applicants remains unchanged: minority background; demonstrated achievement and potential in science and math, and a stated interest in a biomedical career; financial need. The ratio of applicants to participants is usually 4:1.

The program begins in early summer and lasts for ten weeks. Students from outside Oklahoma City are housed in the dormitory facilities at Oklahoma City University. Each student is assigned to a faculty preceptor who is involved actively in a research project. The student works in the lab 40 hours/week, and is expected to develop and carry out an individual research project within the broader framework of the interests and expertise of the faculty preceptor. A formal research paper is prepared and submitted at the conclusion of the program. The quality of the student research and final paper is verified by the fact that several of these student papers have been published in reputable scientific journals.³

The role of the faculty preceptor is central to any success which the program has achieved. Those individuals who are selected are at once committed to the goals of the COHS and willing to dedicate the necessary time and attention to the assigned student. Their active participation serves to guarantee that the quality of the science education is high. As a result, the COHS program is widely-respected within the HSC faculty and has never been the subject of allegations that the content is frivolous or watered-down.

In addition to this core research experience, the COHS students attend noon lectures three times a week presented by various faculty members. Twice a week, the noon period is used for "meet a faculty member" conference. Each of these conferences consist of three COHS students and an interested faculty member. In this small group format, the students are able to discuss informally the requirements for entrance to professional



Left to right: Kerry Cox, presently MS IV (COHS 1970); Lawrence Stutte, presently MS IV (COHS 1972); Roy Wilson, presently MS III (COHS 1972); Sandra Ortega, presently MS II (COHS 1973); Dr Ferretti; Jerome Long, presently MS III (COHS 1972); Kathy Davis, Dental Hygienist (COHS 1973); Cornel Nathan, presently senior pharmacy student (COHS 1974).

schools, the advantages and problems associated with a biomedical career, and related professional matters. This contact also provides the opportunity for the students to develop role models among biomedical professionals.

The students also have access to a computerized learning system (PLATO) at the HSC. Initially, they are required to complete a course in human genetics and subsequently may elect any of more than 500 courses which are available through the PLATO system. During the 1979 program, the students spent a total of 501 hours working with the PLATO system (an average of 19 hours per student).

An arts component was added to the 1979 program, largely through the cooperative efforts of several interested individuals and organizations including the State Arts Council of Oklahoma, the Oklahoma City Arts Council, the Community Foundation of Oklahoma City, and Mr John Kirkpatrick. The students participated in visual and performing arts presentations two evenings a week under the direction of three prominent artists in the State — Tyrone Wilkerson, Lance Henson, and Robbie McMurtry. In addition, week-end educational trips were arranged to observe arts presentations, such as the Oklahoma State Arts Institute at Quartz Mountain and the Tsalagi drama at Tahlequah. The students also attended several performing arts presentations in Oklahoma City.

The arts component was developed on the assumption that this exposure and knowledge

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would enhance the ability of the students to function as biomedical scientists in the future. It was based on the notion that students who are gifted in math and the sciences do not necessarily have a low interest or aptitude for the arts. Indeed, our preliminary evaluations suggest the opposite — those participants who performed highest in the sciences did the same in the arts.¹

At the conclusion of the ten-week program, the students are required to submit a formal paper reporting their research findings. These papers are evaluated by the faculty and a small number are selected for presentation before the group. Upon successful completion of the program, COHS students earn four semester hours of college credit.

C. Is the COHS Achieving Its Goal?

In the course of the ten-week program, several evaluation protocols are administered which permit annual review of program content and direction, as well as student progress. For example, a comprehensive evaluation of the entire program is completed by each participant. In addition, a standardized science knowledge test (Burmeister) is administered on a before/after basis in order to gauge student progress. These assessments have consistently been strongly positive and reaffirmed our view of the efficacy of the program.

A more pertinent measure of the COHS, relative to the defined goals, should focus on the academic achievements after the participants leave the program. Because the project has been in operation for ten years, it is now possible to address this question from an appropriate perspective. Through the support of the Faculty Senate Award at the Health Sciences Center a pilot study is now being conducted on post-COHS academic performance, and the data presented below are drawn from the preliminary findings.

The most tangible measure of goal achievement is the number of former participants who have advanced through the critical academic stages toward a professional degree. By this criteria, the COHS has been an unqualified success. For example, of those participants who are eligible for graduation from a baccalaureate program (viz, four years after their participation in a COHS program), approximately 70% have completed a bachelor's de-

gree. This assumes the conventional four-year period for a baccalaureate degree.

More pertinent to the long-term goals of the program is the number of students who have advanced beyond the baccalaureate level and gained entrance to graduate training programs in the biomedical sciences. Only those students in the 1970-74 classes are currently eligible for post-BA education (4+ years after high school) and this cohort includes a total of 63 students. As Table 2 illustrates, the track record of the program in this regard is also extraordinary. Of this number, ten are attending or have completed medical school (as of May, 1979); at least six additional COHS alumni have applied for entrance to the 1979-80 medical school class, and four of this group have been accepted. In addition, other students from the 1970-74 cohort are attending other graduate programs in the biological sciences.

Although the above data point to a significant level of academic success among COHS alumni, this information takes on added meaning when compared to similar programs in other parts of the country. A recent report in the *New England Journal of Medicine* provides the basis for one such comparison.⁵ The article reported cumulative data on the educational achievements of participants in the Med Start Program which is sponsored by the University

Table 2
Educational Achievement by Class
as of May, 1979

Year	Number	Number ¹ Tracked	Currently Completed in B.A. Program	B.A. Program	Graduate/Professional Training
1970	7	5	—	4	1-MD
1971	7	4	—	2	1-in law school 1-PhD
1972	16	15	3	11	5-Attending Medical School 1-in PhD program
1973	25	21	2	15	4-Attending Medical School 1-PhD
1974	25	19	4	11	1-Attending Pharmacy School 1/Attending PhD Program
1975	21	16	15	—	6-Applying to Medical School 1-Applying to Physicians Assistant Program 1-Attending PhD Program
1976	25	22	21	—	
1977	26	23	23	—	
1978	27	24	24		
1979	26	23	—	—	
Total	205	172	92	43	

¹This number excludes the "repeaters" and those that we cannot locate.

of Arizona Medical School. This program has been in operation for nine years, and has enjoyed wide national publicity.

While the Med Start data are not exactly comparable because the academic achievements of the students are not listed by year of participation (and thus, indicate eligibility for baccalaureate graduation), some summary statistics do permit some comparison with the COHS. During 1971-78, 1631 high school students applied to the Med Start Program and 707 were accepted. A 1978 survey of the former participants yielded 452 responses (of which 83 were still in high school). Of those respondents past high school (369), 25 (7%) had earned a college degree (five of this number had completed the MD). Further, approximately 18% had not enrolled for any post-secondary education.

In the final analysis, much of the success of the COHS program must relate to the supportive climate within the Health Sciences Center. The active interest and participation of the lab preceptors and other faculty, as noted earlier, is decisive. In addition, the program enjoyed the support of the retiring Provost, Dr William Thurman, as well as other members of the administration.

Although the 1980 curriculum was unchanged, we do anticipate the need in the fu-

ture to generate greater support from local sources, both individuals and organizations. In addition, we are also planning a more substantive effort to follow the former participants more carefully and monitor their academic progress. □

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News From The Oklahoma State Department of Health

Hypothyroidism Pilot Project Goes Statewide

A pilot program to detect hypothyroidism in newborns begun last July by the Oklahoma State Department of Health has now been expanded statewide.

During the program's first eleven months, hypothyroidism screening, using a part of the same blood sample utilized for the Phenylketonuria (PKU) tests, was done on 24,639 newborns. After further evaluation, four cases of hypothyroidism were diagnosed and confirmed. Sixty percent of the babies born in Oklahoma were treated through the pilot program. This expansion will make hypothyroidism screening available to 100% of newborns in Oklahoma by July 1, 1980.

Nationally, hypothyroidism occurs in about 1 of 4,000 newborns. Testing is necessary be-

cause symptoms are not easily recognizable in early infancy, the time when treatment must begin to be effective. With treatment, the hypothyroid child will develop normally, but without it the child will suffer growth failure and mental retardation.

Approximately \$50,000 was appropriated by the 1978 State Legislature to purchase special new equipment and training for the state health department's laboratory for hypothyroidism detection. According to Joan K. Leavitt, MD, state health commissioner, analyzing blood samples for hypothyroidism is more complicated than for PKU, as it is necessary to use quantities so small that special radioactive isotope techniques must be used to measure them.

The method used calls for first testing infant's thyroxin level (T4), and if a sample shows low levels, it is examined further for thyroid stimulating hormone (TSH). If TSH levels are high, the infant is diagnosed as probable hypothyroid.

It is expected that out of some 40,000 newborns tested each year about ten will be diagnosed hypothyroid. Follow up investigation is necessary to ascertain whether or not the infant has hypothyroidism before instituting treatment. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MAY, 1980

DISEASE	MAY 1980	MAY 1979	APRIL 1980	Total To Date	
				1980	1979
Amebiasis	3	2	4	16	7
Aseptic Meningitis	4	5	3	16	10
Brucellosis	—	—	—	2	—
Encephalitis, Infectious	1	3	—	3	7
Gonorrhea (Use Form ODH-228)	1051	1012	1134	5484	5011
Hepatitis A	37	19	39	179	96
Hepatitis B	21	5	11	78	35
Hepatitis Unspecified	34	18	25	119	52
Measles (Rubeola)	359	2	163	681	22
Meningococcal Infections	3	3	1	13	19
Pertussis	1	1	—	9	3
Rabies (animal)	37	29	34	132	113
Rocky Mountain Spotted Fever	11	3	1	13	3
Rubella	1	4	—	2	22
Rubella (congenital)	—	—	—	—	—
Salmonellosis	31	24	17	80	80
Shigellosis	10	19	17	72	73
Syphilis (Use Form ODH-228)	11	7	11	42	36
Tetanus	—	—	—	—	—
Tuberculosis	28	20	24	122	147
Tularemia	1	—	—	1	—
Typhoid Fever	—	—	1	1	—

1981 Annual Meeting To Be at Shangri-La

In previous years, OSMA annual meetings involved activities directed primarily toward physicians. Next year, however, physicians will want their families to join them during the 1981 OSMA annual meeting. It will be held at the Shangri-la Resort in Afton, Oklahoma.

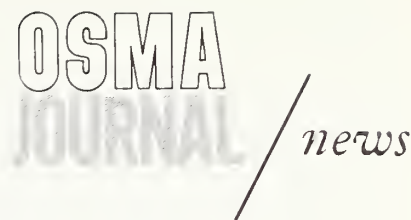
Shangri-la is located on the tip of Monkey Island on Grand Lake o' the Cherokees. It offers an assortment of activities to satisfy the interests of its many guests throughout the year. Unlike past meetings, the 1981 annual meeting will provide enough free time for physicians to relax and enjoy the resort's many facilities with their families.

Among Shangri-la's facilities is the 27-hole Golden Tee golf course. It has been cited in *Golf Digest* as one of the state's top five facilities. The Golden Leaf Recreation Center provides a range of activities including indoor and outdoor champion-size tennis courts, bowling and rental bicycles. Doctors and their families who enjoy water sports will find a haven at the resort. Its lakeside location is perfect for this type of activity. Shangri-la's marina offers fishing boats, cruisers, pontoon boats, skiing equipment and sailboat charters. The resort also offers indoor and outdoor swimming, volleyball, water volleyball, shuffleboard, game room equipment, Tahitian health spas, exercise classes and indoor putting and driving nets.

In addition to all of the recreational facilities, doctors can choose from among Shangri-la's five dining facilities. The Forrest Wasson 12-piece orchestra is featured in one of the dining rooms. Each of the other dining areas offers a distinct atmosphere including a Tahitian terrace, Tahitian courtyard and lakeside patio.

Shangri-la's lodging facilities will provide plenty of room to physician-families of all sizes. The guest rooms are furnished with either double, twin or king-size beds. One, two or three bedroom suites are available. In addition to the bedrooms some suites have living rooms with queen-size hide-a-beds. Others feature complete kitchens and patios facing Grand Lake or the greens and fairways of Shangri-la's Golden Tee Golf Course.

The resort's recreational and other entertainment facilities make it an ideal spot for physicians to enjoy time with their families between the regular business and seminar func-



tions of the annual meeting. Shangri-la's well-equipped conference facilities add to the advantages of this resort for the 1981 OSMA Annual Meeting. □

Hospitals Aren't Villains Says New OHA Employee

"Hospitals are not the villains people think they are," says Brett Husserl, vice-president, Oklahoma Hospital Association, (OHA) Oklahoma City office.

The hospital association's Oklahoma City office was established recently by OHA's Tulsa-based headquarters primarily to assist in governmental relations. The new branch office is now housed at the OSMA headquarters, 601 NW Expressway.

Husserl previously worked as hospital administrator in Pawhuska. He received an MA in health administration from the University of Oklahoma in 1978 and in 1973 he obtained a BS in physical therapy from the university.

"Contrary to what most people think hospitals are very efficient. Few businesses could operate seven days a week, 24 hours a day with such complexity and still remain within the general inflation rate," he said.

Cost containment is among the primary issues concerning the OHA. Husserl said hospitals statewide and across the nation have successfully managed to control expenses via the Voluntary Effort.

"The forces of voluntarism prove more effective than increased government regulation," he said.

According to Husserl after adjustments for inflation, hospital expenses rose only 11.8% nationwide in 1979 while the general inflation rate climbed to 13.4%.

However, inflation still has caused expenses to escalate. Husserl said one primary cause for inflated hospital rates has been the gradual reduction of reimbursements to hospitals by

the government. He explained that in 1966, Medicare and Medicaid were equitable cost-reimbursement programs. However, they have since evolved into a restrictive cost-reduction system.

"The government is slowly starving hospitals by gradually disallowing costs for the hospitals each year," Husserl said.

He explained that costs incurred from reduced reimbursements for Medicare and Medicaid patients must look to the remaining patients and private insurers to make up the difference. "The situation is going towards a real 'catch 22.' Something has to give," Husserl said.

Another major issue involving the hospital association is the health manpower problem. He said OHA is making plans to increase its efforts to improve the nurse-shortage. Husserl said OHA is working to further develop the Increase Active Nursing Professionals in Oklahoma (OANPO) program. OHA established the program to recruit high school students into nursing careers. He said the OHA also will become more involved in contacting key legislators to seek increased funding for nursing programs. □

Survey Includes State Health Care Information

Most Oklahoman's are satisfied with their own health and the available health care services according to a survey compiled in 1979 by the Center for Economic and Management Research. The center is located in the College of Business Administration at the University of Oklahoma, Norman.

The survey was conducted via interviews which solicited responses on a range of subjects including health care. Respondents from more than 2,700 households were involved in the interviewing process. Households were selected so as to represent the ratio of the state's population in rural and urban areas. Individuals participating from each household were picked at random.

Health-related problems—More than 60% of the interviewees claimed having no health problems. Of those who indicated they did have health problems, 46.1% said their problems kept them from doing many of the things they

wish they could do; 72.9% said their problems limited the kind or amount of work they could do on a job, and 65% stated their health condition prevented them from having any kind of job. More than 36% of those unable to work because of health-related reasons have been limited in their ability to work for ten or more years. Nearly 92% said they have no difficulty in obtaining medical treatment when they needed it. The primary reasons given for not receiving proper medical attention included cost, inability to obtain an appointment as soon as needed and non-availability of physicians.

Medical-care sources—Almost 83% of the interviewees said their main source of medical care was at a private doctor's office or clinic. The next highest percentage of interviewees indicated they had no source for medical care. Others said they used group practices, hospital outpatient clinics, hospital emergency rooms, company or industry clinics, homes or other resources.

Hospital emergency rooms—More than 760 interviewees indicated they had used a hospital emergency room within the past year. Of these individuals, the interviewers discerned that 86% had a true emergency. Only 1.4% used the emergency room because they did not have a family doctor and 11% used the facility because no doctor was available.

Hospitalization—Nearly 81% said they had not been hospitalized within the past year. Of the 19.4% who were hospitalized, the mean average for the number of times hospitalized was 1.44 while the mean average for the length of time in the institution was 10.23 days.

Almost 65% of the interviewees who had been hospitalized said they were completely satisfied with the medical services rendered and only 3% were completely dissatisfied. Others varied in their degree of satisfaction between the two extremes.

Health-care financing—More than 46% said they were eligible for government programs. Nearly 52% said they were not eligible and 2.2% did not know. Of those eligible for government programs, 64.6% qualified for Medicare, 18.8% for Medicaid, 18.6% for VA, 8.5% for Champus, 1.5% for Champ VA, 8.2% for Indian Health Service and 8% for other programs. Seventy percent were covered by private health insurance. More than 1,000 respondents said they have used their health insurance within the last year. Nearly 65% of these individuals indicated that their private

insurance payments covered most of the expenses.

Almost 45% of the interviewees said the federal government should assist citizens with health expenses by imposing a national health insurance program. They indicated that the program should be funded by a percentage of current tax revenues. However, 49.1% said they would not support such a program if a tax increase were required. More than 40% said they did not want national health insurance while 14.3% indicated that they did not know.

Ambulance service—Responses relating to ambulance service indicated that 29.3% were completely satisfied with available service. However, 29.1% said they did not know. On a scale from one to nine indicating complete satisfaction to complete dissatisfaction, the average mean was 2.67.

Exercise habits—According to the survey 52.3% of the interviewees exercise regularly. An average mean indicated that the individuals who exercise do so 4.7 times per week for almost 54 minutes at each session.

Eating habits—The survey showed that 50.6% eat breakfast every day. Only 10.3% said they never eat breakfast. Nearly 48% said they never think about their intake of things such as salt, artificial flavors, additives and preservatives while more than 22% said they definitely limit these substances in their diet.

Smoking habit—Almost 67% of the interviewees indicated they do not smoke while 68.3% said they have never smoked. Of those who stopped smoking 82.2% quit more than two years ago. The average mean for the length of time of smoking before stopping was 18.1 years. More than 98% said they stopped on their own and 90.2% indicated they quit “cold turkey.”

Mental health—Another section was included to determine the mental health needs of Oklahomans. Few households indicated that any member had an emotional problem. Of those who did indicate a problem in the family, few said that the person involved depended on drugs or alcohol to alleviate the condition.

Satisfaction in life—The following table indicates the mean average for the satisfaction Oklahomans say they are experiencing in life. It also includes a national comparison compiled

in 1978. The respondents rated the degree of their satisfaction in both surveys on a scale from 0 to 100. ☐

Category	State— 1979	National— 1978
Your neighborhood	78.36	72.26
City or place you live	77.80	not listed
House or apartment	80.76	71.58
Life in U S	86.39	72.79
Life in Oklahoma	84.75	not listed
Your education	70.82	64.33
Your job	78.89	72.10
Your job as a housewife	78.27	72.04
Ways you spend your spare time	75.86	72.51
Your health and physical condition	76.96	75.56
Health care you receive	83.94	not listed
Standard of living	80.07	73.38
Savings and investments	65.37	52.07
Your friendships	84.11	77.04
Your family life	88.24	79.29
Your marriage	91.15	81.36
Your life as a whole	87.54	79.02

☐

Thalidomide Could Become Useful

Researchers have discovered that a drug causing birth defects in European babies in the 1960's could be useful in the treatment of a skin infection.

The Archives of Dermatology reported that thalidomide has been used successfully in the treatment of a skin disease that did not previously respond to treatment. The disease, prurigo nodularis, causes rash and growths like boils. People who have acquired this disease have suffered from these symptoms for many years.

The report said the treatment was successful when applied on three patients from Jerusalem having the disease. It also cited the experiences of an Illinois physician who used the drug on a patient after learning about its success with the Jerusalem patients. Within three weeks the Illinois patient's lesions disappeared and the pruritic rash also vanished.

Thalidomide is known under its trade name as Kevadon and it is currently licensed only for research purposes.

The report said thalidomide could still become a useful drug for some health problems as long as it is not taken by expectant mothers. Other than causing birth defects, thalidomide is nontoxic. The report said that even suicide attempts with this drug have been unsuccessful. ☐

Enzyme Treatment Replaces Surgery

Patients who received chymopapain instead of having surgery for the treatment of a slipped disk continue to improve according to a report citing the results of follow-up studies.

Chymopapain is a controversial enzyme treatment that was prohibited in the US by the Food and Drug Administration in 1975. The enzyme is injected into the spinal column causing the disintegration of the protruding disk.

Manucher J. Javid, MD, neurosurgeon at the University of Wisconsin reported in the *Journal of the American Medical Association* his experience with 124 patients who were treated with the enzyme before the FDA withdrew chymopapain from the market. He said 90 patients (72.6%) had significant improvement, 21 (16.9%) had slight improvement and only 13 (10.5%) had no improvement.

Of the patients taking the enzyme who had never had back surgery, 77 patients (81%) had

marked improvement, 13 (13.7%) had slight improvement and five (5.3%) had no improvement.

Three to six years later a follow-up questionnaire was sent to the patients requesting information about their back condition. More than 100 responded, 83 patients (72.8%) indicated they had no significant improvement and 75 (83.3%) of those individuals having had no previous back surgery said they had major improvement.

"These results indicate that chemonucleolysis can and should be considered an advantageous alternative to surgery in appropriately selected patients," Dr Javid said. The physician says that surgery should be performed only for those few who fail to respond to the enzyme treatment.

More than 17,000 patients have received this enzyme treatment administered by 75 physicians in the United States and Canada. However, it is still unavailable in this country. Physicians in the United States must obtain the enzyme in Canada where it is legal and being used regularly. □

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New Officers Named

The above picture includes the 1980 officers, new and re-elected members of the Board of Trustees and AMA delegates. (Front row, left to right) George H. Kamp, MD, speaker of the House of Delegates; Elvin M. Amen, MD, chairman of the board of Trustees; William M. Leebron, MD, AMA alternate delegate and OSMA past-president; Floyd F. Miller, MD, OSMA president; James B. Pitts, MD, president-elect; John A. McIntyre, MD, vice-president; Larry L. Long Jr., MD, vice-speaker of the House of Delegates.

(Back row, left to right) Joe M. Crosthwait, MD, AMA delegate; Burdge F. Green, MD, re-elected trustee; Perry A. Lambird, MD, AMA delegate, Orange Welborn, MD, AMA alternate delegate, Harlan Thomas, MD, AMA delegate, and Ed L. Calhoon, MD, AMA delegate.

Not pictured: Kenneth W. Whittington, MD, new trustee; Kent Braden, MD, re-elected trustee; Robert Jackson, MD, re-elected trustee; Donald F. Mauritson, MD, alternate trustee; Dave B. Lhevine, MD, alternate trustee; Jodie L. Edge, MD, new trustee; Richard L. Winters, MD, alternate trustee; Wilbur R. Baker II, MD, alternate trustee and Victor L. Robards Jr., MD, alternate AMA delegate. □

Erratum

The Journal regrets that on the Table of Contents page of the June issue that an "MD" was added after the name of Karen T. Hackleman. This was in error.

Legionnaires Disease Could Be Causing Deaths

Legionnaires disease could be causing the deaths of more than 70,000 Americans each year says a research report in a June issue of the *Journal of the American Medical Association*.

The organism of *Legionella pneumophila* was discovered by Ohio scientists after examining the lungs of 224 patients during autopsies. Before these discoveries the deaths of the patients were thought to be caused only by traditional pneumonia.

The report said that Legionnaires disease may have caused 3.6 percent of the pneumonia cases in central Ohio. It also said if this number is used to study the number of adult deaths occurring each year in the United States, an estimated 71,370 of these deaths could be caused by Legionnaires disease.

Diagnosis of this particular disease is difficult for the physician according to the report. □

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Deaths

ROBERT L. LEMBKE, MD
1917-1980

Robert L. Lembke, MD, retired medical director of an oil company in Ponca City, died in June. Born in Byron, Dr Lembke was graduated from the University of Oklahoma College of Medicine in 1950. Following ten years of practice in Pryor, he moved to Ponca City where he entered occupational medicine. He retired in April. Doctor Lembke was a member of the Industrial Medical Association and the American Academy of Occupational Medicine.

JOSEPH FULCHER, MD
1899-1980

Joseph Fulcher, MD, retired, Tulsa urologist, died July 2, 1980. A native of Birta, Arkansas, Fulcher was graduated from the University of Tennessee College of Medicine in 1926. Doctor Fulcher was active in medical circles and was a member of the American Urological Society. He was awarded an OSMA Life Membership in 1970. □

IN MEMORIAM

1979

<i>John H. Robinson, MD</i>	<i>July 30</i>
<i>Marvin Elkins, MD</i>	<i>August 20</i>
<i>Hugh J. Evans, MD</i>	<i>August 25</i>
<i>Walter H. Dersch, Jr., MD</i>	<i>August 26</i>
<i>Caspar A. Hicks, MD</i>	<i>August 27</i>
<i>William R. Schmieding, PhD</i>	<i>September 16</i>
<i>Ernest Lachman, MD</i>	<i>September 21</i>
<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>
<i>Charles H. Eads, MD</i>	<i>March 8</i>
<i>Paul C. Gallaher, MD</i>	<i>April 20</i>
<i>Ennis M. Gullatt, MD</i>	<i>April 26</i>
<i>Elton W. LeHew, MD</i>	<i>May 3</i>
<i>Robert C. Lawson, MD</i>	<i>May 17</i>
<i>John E. Highland, MD</i>	<i>April 28</i>
<i>H. Violet Sturgeon Minton, MD</i>	<i>April 29</i>
<i>C. W. Arrendell, MD</i>	<i>May 6</i>
<i>Edward A. Abernethy, MD</i>	<i>May 9</i>
<i>William F. Thomas, Jr., MD</i>	<i>May 17</i>
<i>Robert L. Lembke, MD</i>	<i>June</i>
<i>Joseph Fulcher, MD</i>	<i>July 2</i>

□

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Physicians to Assist in New GM Retirement Plan

Metropolitan Life Insurance Company is requesting assistance from Oklahoma physicians in filing claims under a special claims processing system for General Motors' (GM) retirees, surviving spouses and their dependents.

Metropolitan, a primary health insurer for Oklahoma's GM retirees and their qualified family members, has developed the "General Motors Retiree Health Care Servicing Program" via an arrangement with the government and carriers handling Medicare Part B. The new program involves a direct filing of claims to Metropolitan by physicians and other health care providers.

"The advantage of this system to you (the provider) is the prompt payment of claims by Metropolitan without the need to submit claims to Medicare. The advantage to your patient is the payment of the full scope and level of General Motors Health Care coverage without the need to suffer out-of-pocket expenses while waiting for reimbursement from Medicare," says Paul S. Entmacher, MD, vice-president and chief medical director of Metropolitan Life Insurance Company.

After Metropolitan issues payment to the provider for the services rendered, it then seeks reimbursement from the Medicare carrier for any services not covered by Metropolitan. The new system involves no deductibles or co-payments (exception, outpatient psychiatric services). Entmacher also says that providers should not file with both Medicare and Metropolitan because this could result in delay or possible duplicate payment that would require a repayment.

GM retirees and surviving spouses who are enrolled in the new claim processing system have been issued a distinctive identification card to prove their enrollment in the new program.

Claims for retirees, surviving spouses and their eligible dependents who are not enrolled for Medicare Part B should be filed in the same manner as the claims filed for active employees. The standard Metropolitan "Statement Claim" (Form G. 105 GM) should be used. Retirees or surviving spouses should complete the "Statement Claimant" section of this form. Providers can opt to complete the section entitled "Statement of Physician" or attach their standard billing form to the claim form. All of

these forms should be forwarded directly to Metropolitan.

Most of Oklahoma's carriers handling Medicare Part B are using a standard claim form established by the American Medical Association. Metropolitan is requesting that providers attach this form to its "Statement Claim" after the retiree or surviving spouse has completed the "Statement of Claimant."

For further inquiries relating to claims and service for retirees and surviving spouses, call Metropolitan's toll free number — 800-241-9964. □

Auxiliary to Shift Emphasis

The OSMA Auxiliary will shift its emphasis this year in its effort to help the medical profession says Mrs James B. Eskridge III, OSMA Auxiliary president.

The OSMA Auxiliary members have participated in two major projects for several years. These projects are raising funds for the Nurses Loan Fund and the American Medical Association Education and Research Fund. The president said that in recent years the greatest emphasis has been placed on the AMA-ERF project. She explained that the auxiliary will now focus its efforts toward developing the Nurses Loan Fund in order to better assist potential nurses having financial needs.

"We feel this is an area that can be a direct help to the doctors," says Mrs Eskridge.

The loans are usually short term loans for small amounts of money that are repaid within three years after the borrower graduates from nursing school. Interest for these loans is six percent per annum, but it increases to eight percent if the loan is not paid within the three-year period.

Mrs Eskridge said the auxiliary will also continue seeking donations for AMA-ERF. She said the state auxiliary usually raises approximately \$20,000 each year for AMA-ERF through various activities organized at the county level. Mrs Eskridge said she doesn't believe many doctors really understand how this money is divided among the state's medical schools. She explained that the funds are distributed among the state's medical schools according to the requests of the physicians making contributions. Consequently, schools with the most graduates making donations usually receive the largest portion of the funds.

The state auxiliary will also participate in the second year of the national auxiliary campaign "Shape Up For Life." The campaign stresses good health practices and this year the emphasis will be on exercise. Mrs Eskridge said the state auxiliary functions as a vehicle to motivate members at the county level to organize activities for the campaign. She said one county auxiliary is sponsoring an aerobics class for physicians' wives. Mrs Eskridge said county auxiliaries in some of the non-metropolitan areas are locating places for peo-

ple to walk especially during bad weather. As a result of this effort several high schools have opened their facilities to the community as a walking center before and after school hours.

"It just takes a little imagination, coordination and organization in communities to come up with such projects at no expense to anyone," Mrs Eskridge remarked.

She said the state auxiliary will also participate in various workshops throughout the year. Topics for these workshops will include parliamentary procedures, AMA-ERF, membership recruitment and "Shape Up For Life." □

Book Reviews

Dx and Rx: A Physician's Guide to Medical Writing. By John H. Dirckx, 238 pages. Boston: G. K. Hall & Company, 1977.

Dr Dirckx states in the Preface that the purpose of this book "is to give specific and concrete advice to the physician who wants to improve the accuracy, clarity, and readability of his medical writing." He further points out that the medical practitioner, teacher, or researcher who is called to authorship by inclination or duty may discover that his professional training and experience have ill-prepared him for this line of work. Finding himself unequal to the task of presenting his ideas in concise, exact, graceful prose, he naturally looks for help from a manual or textbook of technical writing. The author further comments "I believe that the present volume comes closer to meeting his needs than any other currently available."

Dirckx has divided the work into three sections which he terms, respectively, the anatomy, the physiology, and the pathology of the language. The first section, made up of two chapters, provides an interesting introduction to linguistics and the printed word. The second part is a mixture of several different subjects, all somewhat related. The most valuable portions of this section are the two chapters providing a survey of grammar. Here Dirckx defines and provides, in an enjoyable manner, examples of the component parts of a sentence. The remaining chapters in this section are entitled as follows: "Accuracy," "Organization," "Clarity," and "Readability." Each of these chapters ends with "practical guidelines" at

the end of the chapter which contains both useful and non-useful information, as such assumptions as "present information directly, candidly, and fully" (page 114) and "revise your work carefully and repeatedly so that every sentence is perfectly clear on the first reading." (page 150)

The last section entitled "Blunders and Blather: The Pathology of Language" discusses a variety of different errors of exposition, such as errors in word choice, faults of syntax, and faults of concept and style.

Despite some larger claims, the book deals primarily with only one problem — faulty prose style — which is only one of the several problems a writer must face.

For the beginning writer, it will serve as a guide to simple principles in avoiding certain errors, particularly in this context. However, it will do little to help him organize his perfectly written sentences and paragraphs into the mold of a medical article or a book chapter. This book is particularly good on the origin of medical words, word structure and order, readability, and logic. For a book that emphasizes correct prose style and accurate word choice, the slang-like title seems rather inappropriate. *Harris D. Riley, Jr., MD*

Viral Hepatitis. Saul Krugman and David J. Gocke. Philadelphia: W. B. Saunders Co., 1978. 147 pages. Illustrations. Price \$14.50.

The almost explosive increase in knowledge of the natural history and other aspects of viral hepatitis during the past 10 to 15 years re-

quires the periodic publication of a comprehensive review of new findings. Krugman and Gocke perform this duty in admirable manner with a shorty pithy monograph which updates progress in the characterization, treatment, and prevention of hepatitis A, B, and non-A, non-B infections. The review is pertinent, readable, and provides a rapid familiarization with an everburgeoning field.

The strength of this book is clearly concentrated in the discussions of the virologic and epidemiologic aspects of acute viral and post-transfusion hepatitis. These areas reflect the principal investigative interests of the authors and are authoritatively presented. It is complemented by carefully selected tables, graphs, and electron micrographs. The behavior and significance of the various serologic markers, especially those of the hepatitis B virus, are not as well presented and the reader is left with certain important questions. Speculation on the pathogenesis of acute fulminant hepatitis is properly focused. Prevailing concepts such as direct cytopathogenicity, immunologic reactivity, and host genome alteration are appropriately discussed. Speculation concerning the progression of acute chronic disease is only lightly touched on.

The clinical descriptions of acute, fulminant, and chronic hepatitis are briefly presented; however, hepatitis B surface antigen-positive chronic active liver disease is not distinguished

from antigen-negative disease, and the exciting investigative use of antiviral agents, especially interferon, in the management of this condition is not mentioned. One of the most important portions of the book is the last chapter on prevention.

This is an excellent summary of current information on hepatitis which will be of value to all physicians. *Harris D. Riley, Jr., MD*

Practical Epidemiology. Second Edition. D.J.P. Barker, with chapters by F. J. Bennett. Edinburgh: Churchill Livingstone. Distributed by Longman's, Inc., 1976. 180 pages, \$6.00.

This small book is one of five offerings in the "Medicine in the Tropics" series and is intended for use by medical workers in developing countries. The author has accurately pursued the concept of the title and details the everyday considerations necessary to successful epidemiologic studies in non-industrialized societies. The text uses examples of pitfalls that have been encountered in the course of such studies and offers suggestions as to how they might be avoided in the future. This book is written specifically for a particular audience. However, it is interesting reading for those concerned with the field of epidemiology. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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FREE AT LAST

I see in the paper that we physicians control medical services—and it is predicted that more anti-trust lawsuits can be expected because of this fact. The stories reporting this sorry state of affairs leave the reader with the distinct impression that physicians have traditionally controlled medical care with the zeal of monopolists, the tyranny of despots and the arrogance of inquisitors and *now* this autocratic dominion is being wrested from our greedy clutches and soon we will be dethroned.

It appears we are destined to join a multitude of individuals such as physicians' assistants, emergency medical technicians, psychologists, chiropractors, physiotherapists and all other licensed professionals who have a right to provide direct patient services. Medical groups and facilities which attempt to abrogate these rights are threatened with dire consequences and will be prosecuted as violators of anti-trust laws.

Now if you were in the business of selling malpractice insurance or practicing law could you imagine a more propitious turn of events? Think of it! Your potential clientele will increase from a half-million to something in the neighborhood of ten million licensed professionals who, while providing direct patient services will feel compelled to carry malpractice insurance and will, in due course, need the services of one or more lawyers to help defend them from the accusations, announced by some other lawyer, made by one of their patients. And, since each of these providers will be enjoying the freedom of practicing independently of physicians, each defendant will also need the services of one or more lawyers.

Although it may be difficult, try to imagine the staff structure of the hospitals of tomorrow with departments of nurse-practitioners, psychologists, emergency medical technology, chiropractic and herbal medicine. And, if some states license Christian Science practitioners,

faith healers and acupuncturists, they will join us, via the courts, on the professional staffs of hospitals. I cannot imagine how patients of some of these licensed professionals would benefit from hospitalization, but then there are — or were — many things I could not imagine.

Also, as a result of another judicial ruling (by the Fourth Circuit Court), health insurance policies probably will become separate and specific in their provisions for reimbursement of fees from each of the licensed professionals who exercise their new freedom and provide direct patient services. Of course, in the event of controversy, the insurance companies need only enlarge their legal staffs or, perhaps, go out of business altogether.

So, dear colleagues, don't despair. Help is on the way. Before long most hospitals will have one-or-two-thousand-member staffs and since there will be only twenty or thirty new committees, maybe you can get off a few of those you've been on for the past fourteen years. Also, in case you become the defendant in a malpractice case, take heart. You probably won't live long enough to appear in court. The dockets likely will extend only to the average life expectancy of the judges.

Finally, a word of caution. At this time (at least) there is no law which forces you, as an individual physician enjoying the freedom of delivering direct patient services to consult with, work with or associate with any other licensed professional enjoying the same freedom. But if you decide that you will abstain from the pleasure of full participation, you'd best let your patients know of your decision and do so in clear and unmistakable terms. Otherwise your phone might ring some New Year's Eve and one of these freed, licensed professionals will say, "Doctor Jones, I've had this patient of yours under treatment for severe headaches for the past nine weeks and she doesn't seem to be responding. She has suggested that I consult with you and I told her I would be happy to do so. She is in Municipal Hospital, room number . . ."

MRJ

In reading the book "Medical Education in Oklahoma" written by Dr Mark R. Everett, I had the feeling of de jea vou. Doctor Everett, former dean of the University of Oklahoma College of Medicine has written about the history of the institution from 1900-1931. Many of the problems faced early in the college's history have recurred.



There is a chapter in the book dealing with chiropractors and medical education at the university. As you know, the AMA medical ethics were recently changed, and one of the changes was a result of costly litigation brought by chiropractors. On July 27, 1931 by the executive order of Governor William H. (Alfalfa Bill) Murray, chiropractors were allowed to see patients at our University Hospital. As a result of this action, the school of medicine was threatened with loss of accreditation. The dean of the medical school at that time, Dr Leroy L. Long, resigned because of this action and other personal and political attacks by the governor. The Oklahoma State Medical Association requested that a brief be prepared stating that under the law, cults could not practice at the University Hospital. However, chiropractors were not banned from

the hospital until the Board of Regents ruled the following month that the institution was created and organized strictly as a medical and surgical institution, and that members of two professions could not very well be accommodated in one institution. Throughout the book, Dean Everett tells of the long history of involvement of OSMA in furthering the medical school and its actions to prevent political interference. Editorials from our *Journal* are freely quoted and he repeatedly refers to OSMA committees that fought to strengthen medical education in our state.

The chapters deal with obtaining sufficient financial support for the college, osteopathic physician education, adding new buildings and additional teaching beds, as well as setting aside beds for private patients. Do any of these subjects sound familiar today?

Doctor Everett notes that the dean of the college mentioned the public complains of too few medical graduates locating their practices in rural districts of the state. He attributed this maldistribution to the preference of citizens in small communities to be transported by automobile over good roads to the larger towns and cities. The year was 1926.

The more things change, the more they remain the same.

A handwritten signature in dark ink, appearing to read "Lloyd J. Miller, MD". The signature is fluid and cursive.

Changing Frequency in Recovery of Atypical Mycobacteria

D. J. FLOURNOY, PhD
EVERETT R. RHOADES, MD
HAROLD G. MUCHMORE, MD
S. M. H. QADRI, PhD

A four-year retrospective study, at the Veterans Administration Medical Center, showed a significant rise in the percentage of patients harboring atypical mycobacteria.

INTRODUCTION

Increases in atypical mycobacterial infections have recently been reported in the United States.¹⁻² Another study notes a significant number of non-pulmonary infections caused by atypical mycobacteria.³ During a comparison of mycobacterial culture statistics from the last four years at the Veterans Administration Medical Center, an increased incidence of positive atypical cultures was noticed, and is the subject of this report.

MATERIALS AND METHODS

Institution. Veterans Administration Medical Center (VAMC) is a 434-bed general medi-

cal and surgical hospital serving primarily adult male patients. The hospital is a teaching institution and operates a large ambulatory care facility which was the source of a large portion of the mycobacterial cultures discussed here. Patients are almost exclusively from Oklahoma and north central Texas.

Identification of isolates. At the VAMC, all mycobacteria were identified by conventional methods described elsewhere.⁴⁻⁵ Test controls were run on stock cultures which were maintained by storage on Lowenstein-Jensen medium at 4°C. The identification of all atypical mycobacteria was confirmed by reference laboratories. Smears were stained by the fluorochrome method.⁴

RESULTS

A summary of mycobacterial cultures at the VAMC from 1976 to 1979 is noted in Table 1. During the period there was a steady decline in the number of specimens referred to the laboratory for mycobacterial culture from 3338 in 1976 to 3063 in 1979. Likewise, the total number of positive cultures varied from 203 to 114 over the same period. This decrease appeared to be made up predominantly by a fall in positive *M. tuberculosis* cultures from 139 to 66. Even though the number of positive atypical mycobacterial cultures declined from 64 to 48, the percentage of positive atypical

mycobacterial cultures, compared to all positive cultures, rose from 36% to 42%.

The greatest change in the impact of atypical organisms becomes apparent when comparing patients rather than cultures. During the period of study the number of patients with positive cultures declined from 57 to 34. The percentage of patients with positive *M. tuberculosis* cultures decreased from 74% to 59%; whereas, the percentage of patients with positive atypical mycobacterial cultures increased from 26% to 41%. *M. kansasii* and *M. avium-intracellulare* were common isolates during the interval.

Data from University Hospital and Clinics, a neighboring institution, revealed the following percentages of patients with atypical mycobacterial cultures: 25% (1976), 11% (1977), 13% (1978) and 18% (1979).

Many patients with positive mycobacterial cultures also had positive cultures, with the same organism, in previous years and were termed repeaters. For the years 1976 through 1979, respectively, the percentages of repeaters were 28%, 26%, 24% and 32%. During the same interval, the percentages of repeaters with atypical organisms were 9% (1976), 10% (1977), 13% (1978), and 20% (1979). Therefore

about one-fourth-to-one-third of the patients with positive mycobacterial cultures were repeaters, of which many had positive atypical mycobacterial cultures.

DISCUSSION

The importance of infections with atypical mycobacteria has been reviewed previously.⁶ Infections with atypicals are even more prevalent than those of *M. tuberculosis* in some areas of the United States.⁷ In addition, several recent investigations have noted increases in atypical mycobacterial infections in Texas¹ and Wisconsin². The increase in proportion of patients with atypical mycobacteria at the VAMC is in agreement with these reports. Likewise, the distribution of cases between *M. kansasii* and *M. avium-intracellulare* is similar.

In our study, there seems to have been a slight decline in the number of mycobacterial cultures requested by physicians in the four years under consideration. With this decline in requests, the percentage of all cultures found to be positive for any mycobacteria also declined. The proportion of all positive cultures

Table 1.
Mycobacterial cultures at VAMC
(1976-1979)

Classification	1976	1977	1978	1979
Total cultures	3338	3542	3256	3063
Total positive cultures:	203	230	141	114
TB	139	170	84	66
Atypicals	64	60	56	48
Patients with positive cultures	57	57	55	34
TB	42	39	30	20
Atypicals: (total)	15	18	25	14
<i>M. kansasii</i>	4	8	6	7
<i>M. avium-intracellulare</i>	10	7	9	6
<i>M. fortuitum</i>	1	1	1	0
<i>M. marinum</i>	0	1	0	0
<i>M. simiae</i>	0	1	1	1
<i>M. gordonae</i>	0	0	4	0
unidentified	0	0	4	0
Positive smear/positive culture	121	126	56	78
Positive smear/negative culture	18	18	5	6
Negative smear/positive culture	82	104	84	36

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A 1956 graduate of the University of Oklahoma School of Medicine, Everett R. Rhoades, MD, is Professor of Medicine and Microbiology and Chief of the Infectious Disease Section at the Veterans Administration Medical Center in Oklahoma City.

Harold G. Muchmore, MD, a 1946 graduate of the University of Oklahoma School of Medicine, is the Carl Puckett Professor of Pulmonary Diseases and Chief of the Tuberculosis Section of the Veterans Administration Medical Center in Oklahoma City.

S. M. H. Qadri, PhD, a 1968 graduate of the University of Texas at Austin, is Associate Professor of Pathology and Director of Microbiology at University Hospital and Clinics in Oklahoma City.

that revealed any atypical mycobacteria was 32% in 1976, 26% in 1977, 40% in 1978 and 42% in 1979. Thus, from about one-third-to-nearly-one-half of the isolates recovered from this laboratory are atypical.

If one considers the patients represented by these cultures, the data become more significant. The proportion of patients with positive cultures of atypical mycobacteria increased from 26% in 1976 to 41% in 1979.

The increase in proportion of patients with atypical mycobacteria could be the result of selection rather than an actual increase. Generally, atypicals are resistant to the antituberculosis drugs while most strains of *M. tuberculosis* are susceptible.⁸ Therefore, it isn't unusual for patients with atypicals to harbor these agents for several years. Sputum cultures of patients with *M. tuberculosis* usually become negative within a year, however. This occurrence would have the effect of adding patients with atypical mycobacterial infections each year. During the interval reviewed in this study, the percentage of repeaters with *M. tuberculosis* declined from 19% in 1976 to 12% in 1979 with a corresponding increase in atypical repeaters from 9% in 1976 to 20% in 1979. This reveals that many *M. tuberculosis*

infections are indeed persisting but in less proportion than atypicals.

This increase in the number of atypical isolates at this institution has reached the point where the problem is almost of the magnitude of *M. tuberculosis*. Because of the predilection of atypical mycobacteria for patients with underlying lung disease and the problem of drug resistance, greater attention will need to be given to the management of these cases in the future. □

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Seminar on Antimicrobial Therapy III

The Penicillins

EVERETT R. RHOADES, MD

Penicillins comprise a large and growing group of antibiotics of considerable complexity. They remain the mainstay of therapy of Gram-positive and many Gram-negative infections.

PENICILLINS

This group of antimicrobials continues to be an extremely important component of therapy, even with the development of a large number of other antibiotics. Modifications of the primary compound have extended the usefulness of these drugs. Indeed, within the penicillin group, there are a number of separate compounds with different effects, making more complicated the choices faced by clinicians.

The central structural unit of all penicillins is 6-amino penicillanic acid, a N-containing ring to which a critical adjacent configuration is added: the beta-lactam ring. This ring seems to maintain a steric configuration of the

penicillin molecule conferring upon it the ability to interfere with manufacture of bacterial cell wall. The lactam ring is reasonably easily hydrolyzed, which destroys the effectiveness of the penicillin. A number of bacteria elaborate enzymes called beta-lactamases which by destruction of the lactam ring produce resistance to penicillins. These include staphylococci and some gram-negative organisms.

There are two major sites at which radicals may be substituted in the basic molecule. These substitutions may confer greater stability upon the lactam ring, or may have other effects such as increasing the antibacterial spectrum.

MECHANISM OF ACTION

All penicillins destroy cross-linkages in the cell wall of actively dividing bacteria. This causes lysis and disruption of bacteria, especially of gram-positive organisms which have a higher internal osmotic pressure than do gram-negative organisms. Non-dividing cells are not killed by penicillin and therefore this drug may be ineffective in the presence of agents which interfere with cell metabolism. The more complex outer portion of the cell wall of gram-negative bacteria interferes with attachment of penicillin to the cells, accounting for the resistance of many of these organisms

From the Veterans Administration Hospital, Oklahoma City, Oklahoma.

Table 1
Some Preparations of Penicillin G

Drug	Preparation	Company
Penicillin G	injection	Squibb
penicillin G USP	powder	Purepac
penicillin G	tablets	Comer
penicillin G	tablets	Rexall
Pentids	tablets, syrup	Squibb
Pfizerpen	injection	Pfizer
Pfizerpen G	tablets	Pfipharmics
SK penicillin G	solution, tablets	Smith Kline & French
penicillin G sodium	injection	Squibb

to penicillins. Many gram-negative organisms also produce lactamases which destroy penicillin.

PHARMACOLOGY

The most significant fact about the pharmacodynamics of penicillin is that it is rapidly absorbed and excreted and diffuses well into body secretions. The renal excretion of penicillin is blocked by probenecid, which is sometimes of value in increasing blood levels of penicillin, especially with oral regimens. Because the pharmacology of each penicillin derivative is so different from the others, comments about pharmacodynamics will be made for each example.

CLASSES OF PENICILLIN

I. NATURAL PENICILLINS

A: *Benzylpenicillin (G)* – This is the prototype, original penicillin (Table 1)

1. *Sodium penicillin G*

Mainstay of IV therapy, very soluble. Serum half-life of IV bolus is 30 minutes. Commonly referred to as "aqueous penicillin" (1 unit = 0.6 mcg; one million u. = 600 mg)

2. *Potassium penicillin G*

Similar to sodium salt

3. *Procaine penicillin G* (Table 2)

The addition of the procaine slows absorption, making IM administration

Table 2
Procaine Penicillin G

Trade Name	Company
Crystacillin 300 AS	Squibb
Crystacillin 600 AS	Squibb
Duracillin AS	Lilly
Wycillin	Wyeth
Wycillin with probenecid	Wyeth

feasible. This form is used for organisms of exquisite susceptibility. Used only IM. The procaine is rarely associated with "pseudoanaphylaxis" characterized by hypertension, convulsions, and hallucinations. (1 unit = 1.0 mcg; one million units = 1 gm)

4. *Benzathine penicillin G* ("Bicillin"-Wyeth)

Do not confuse with benzyl penicillin. Even more insoluble, so may have blood level of few mcg/ml for two-four weeks. Is used only IM. Major value is in the treatment of syphilis and prevention of rheumatic fever. A mixture of benzathine and procaine penicillin has been recommended as a single-dose treatment for streptococcal pharyngitis in children. Various preparations are shown in Table 3. (1 unit = 0.75 mcg; one million units = 750 mg)

B.: *Phenoxymethylpenicillin (V)* ("PCN-V-K"; "V-Cillin")

Somewhat more acid resistant than penicillin G, therefore is a popular oral form. The spectrum of activity is the same as for penicillin G. It produces about twice the blood level of penicillin G. Some commercial preparations are shown in Table 4.

Table 3
Bicillin

Benzathine Penicillin G
Bicillin L-A tubex ^R (Wyeth)
600,000 ^u /ml
(avail in 1.5, 2.0 & 4.0 ml sizes)
multidose vial 300,000 ^u /ml
600,000 ^u /ml
Bicillin C-R (Wyeth)
Rationale: to obtain a single dose regimen
multidose vial
150,000 ^u . benzathine pen G/ml
150,000 ^u . procaine pen G/ml
tubex ^R
300,000 ^u . benzathine pen G
300,000 ^u . procaine pen G
each syringe has 4 ml (total pen dose 2.4 mill u.)
Bicillin C-R 900/300
tubex ^R , each 2ml. contains:
900,000 ^u . benzathine pen G
300,000 ^u . procaine pen G
may be sufficient as single dose therapy of beta-strep pharyngitis in children.

Table 4
Some preparations of Penicillin V
(Potassium phenoxymethyl Penicillin)

Preparation	Company
Betapen VK	Bristol
Ledercillin VK	Lederle
Pencillin V powder	Purepac
Penicillin V tablets	Purepac
Penicillin V (Susp)	Rexall
Penicillin V tablets	Rexall
Penapar VK	Parke-Davis
Penicillin VK (powd. & tablets)	Comer
PenVee D (oral soln & tabs)	Wyeth
Pfizerpen VK (tabs & soln)	Pfipharmics
Robicillin VK	Robins
SK-penicillin VK (tabs & solution)	Smith, Kline & French
Viticillin VK (granules & tablets)	Upjohn
V-cillin K (solution & tablets)	Lilly
Veetids (solution & tablets)	Squibb

II. PENICILLINASE RESISTANT PENICILLINS

Are less active against streptococci and pneumococci than penicillin G but in the usually employed doses these organisms are uniformly susceptible (Table 5)

A: Methicillin

("Staphcillin"-Beecham)

1. Is the "typical" anti-staphylococcal drug
2. Staphylococci resistant to methicillin now being encountered, especially *S. epidermidis*.
3. Not effective against gram-negative or anaerobic bacteria
4. Nephrotoxicity not uncommon
5. Usual intravenous dose 8-16 gm/day

B: Nafcillin

("Unipen"-Wyeth)

1. Similar in activity to methicillin but

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Table 5
Penicillinase-Resistant Penicillins
(Antistaphylococcal Penicillins)

Trade Name	Preparation	Company
Celbenin	Methicillin	Beecham
Staphcillin	Methicillin	Bristol
Bactocil	Oxacillin	Beecham
Prostaphlin	Oxacillin	Bristol
Cloxapen	Cloxacillin	Beecham
Tegopen	Cloxacillin	Bristol
Dycill	Dicloxacillin	Beecham
Dynapen	Dicloxacillin	Bristol
Nafcil	Nafcillin	Bristol
Unipen	Nafcillin	Wyeth

a: Only 30% excreted in urine (large concentrations however, *do* appear in urine), 70% via liver.

b: is Less nephrotoxic than methicillin

c: More active against all streptococci than methicillin

2. Used IM or IV, usual dose 6-12 gm/day

3. Only minor dose reduction necessary in presence of renal failure

C. Isoxazolyl penicillins

1. Are acid resistant (hence can be given orally) and are penicillinase resistant
2. Examples: oxacillin ("Prostaphlin"-Bristol)
cloxacillin ("Tegopen"-Bristol)
dicloxacillin ("Dynapen"-Bristol)
3. Dicloxacillin more effective against staphylococci and streptococci. Oral absorption of both cloxacillin and dicloxacillin is superior to oxacillin.
4. Can give oxacillin and cloxacillin IV or IM.

Table 6
Some Preparations of Ampicillin

Trade Name	Preparation	Company
Amcill	capsules, suspension	Parke-Davis
Amcill-S	steri vial	
Ampicillin	capsules, powder	Rexall
Ampicillin	capsules, powder	Comer
Ampicillin	suspension	Purepac
Omnipen	capsules, suspension	Wyeth
Pen A		Pfipharmics
Penbritin	capsules, suspension, drops	Ayerst
Pensyn	capsules, powder	Upjohn
Polycillin		Bristol
Polycillin N	injection	
Polycillin PRB		
Principen N		Squibb
SK Ampicillin		Smith Kline & French

5. Primary use is in treating staphylococcal infections
6. Cloxacillin and dicloxacillin may be very useful in long term treatment of osteomyelitis.

III. AMINOPENICILLINS

More acid stable than penicillin G and spectrum extends to some gram-negative organisms. Susceptible to staphylococcal beta-lactamase. More skin rashes appear. A very popular form of penicillin.

A: *Ampicillin* (See Table 6 for commercial preparations)

1. Equal to penicillin G for gram-positive organisms, better than penicillin G for *Streptococcus faecalis*.
2. Better than penicillin G for *Hemophilus* and certain members of Enterobacteriaceae, including *Shigella* and *Salmonella*.
3. Resistance of a number of gram-negative organisms including *Hemophilus influenzae* and *Salmonellae* requires careful monitoring of local susceptibility patterns.
4. May be given orally, IM or IV.
5. Widely used to treat urinary tract and respiratory tract infections, especially in non-hospitalized patients.
6. A single 3.5 gm oral dose with 1.0 gm of probenecid is effective in treatment of gonorrheal urethritis.

B: *Amoxicillin* (Table 7)

1. Present information suggests this drug is equivalent to ampicillin except that considerably higher serum levels are achieved after an oral dose.
2. It is available only for oral use.
3. A single 3.0 gm dose is effective for uncomplicated gonococcal urethritis, if given with 1.0 gm of probenecid.

C: *Hetacillin* ("Versapen"-Bristol)

1. Hydrolyzes to ampicillin; hence, no advantage over ampicillin.

D: *Cyclacillin* ("Cyclopen"-Wyeth)

1. Spectrum essentially that of ampicillin.
2. Higher blood levels and fewer side effects than with ampicillin.
3. Available in tablets and suspension.

IV. CARBOXYLPENICILLINS

Specifically more effective against pseudomonas, require high concentrations for MIC.

A: *Carbenicillin* ("Geopen"-Pfizer)

Table 7

Amoxicillin

Trade Name	Preparation	Company
Utimox	capsules, suspension, drops	Parke-Davis
Amoxicillin	capsules & oral suspension	Comer
Amoxil	capsules, oral suspension	Beecham
Larotid	caps, oral suspension, drops	Roche
Polymox	caps, oral suspension, drops	Bristol
Robamox,		
Robacaps	capsules, oral suspension	Robins
Trimox	capsules, oral suspension	Squibb
Wymox	capsules, oral suspension	Wyeth

1. More effective against indole-positive *Proteus* than ampicillin otherwise about the same spectrum. *Klebsiella* are resistant. Susceptible to staphylococcal beta-lactamase.
2. Only IM or IV administration is effective.
3. Because large volumes are given, sodium load may be a problem in certain patients. One gram of carbenicillin yields 4.7 mEq of sodium. There may also be displacement of potassium with resultant metabolic alkalosis.
4. Synergistic with gentamicin against *Pseudomonas aeruginosa*
5. In high concentrations can inactivate gentamicin in vitro (to some extent in vivo).
 - a. Give separately. May need to monitor gentamicin serum levels.

B: *Indanyl Carbenicillin* ("Geocillin"-Roerig)

1. Useful only in treatment of *Pseudomonas* urinary tract infections.
2. Of very limited usefulness and widespread use might increase the number of organisms resistant to carbenicillin.

C: *Ticarcillin* ("Ticar"-Beecham)

1. Very similar to carbenicillin but somewhat more effective against *Pseudomonas*, permits a smaller dose to be given.
2. Perhaps has some role in the treatment of *Bacteroides fragilis*.

GENERAL INDICATIONS FOR THE USE OF PENICILLINS

Penicillins are ordinarily the drugs of first consideration in the treatment of gram-

positive organisms, especially staphylococci and streptococci. A summary of the common indications for penicillins is shown in Table 8. It is apparent that penicillins are the drugs of choice in a wide variety of conditions, especially in infections of the respiratory tract. Note that in most instances there are alternative drugs which may be considered. Penicillins also tend to be active against small Gram-negative coccobacilli such as *Neisseria* and *Hemophilus*. In syphilis, penicillin should be used if at all possible, especially for late manifestations.

PENICILLIN ALLERGY

All too often the limiting factor in penicillin therapy is the history of "allergy." Even when this history is inaccurate, in the climate of litigation prevailing, the physician is seriously hampered in the use of penicillin in a person with allergy. It has been estimated that 10 per cent of all drug allergy is associated with penicillin. This allergy, at least until about 1970 has been estimated to result in about 300 deaths in the United States each year. The overall incidence of penicillin allergic reactions is somewhere between one and ten per cent for each course of therapy. About three of 10,000 courses result in severe reactions and one or two anaphylactic deaths may occur with each 100,000 courses of therapy. Thus, even though the usual physician may not encounter more than one anaphylactic death in his career, because of the enormous numbers of doses given, the problem in the entire population is a significant one. Thus, where alternative drugs are available for minor infections, the recommendation that they rather than penicillin be used is not too unreasonable (see "The Mystique of Penicillin" below).

Skin tests for allergy using penicillin and its derivatives are now available and identify with a high degree of accuracy, those persons who are likely to have severe reactions. When penicillin therapy is mandatory, one may attempt to desensitize the patient and proceed with therapy, keeping in mind that some risk is attendant even after negative skin testing or after desensitization. A patient experiencing anaphylaxis should be observed for several hours and should be maintained with patent intravenous lines in place.

Initially, this interesting phenomenon could be mistaken for anaphylaxis. However, attention to blood pressure (which is often elevated in this condition) and behavior of the patient usually permits ready distinction. Pseudoanaphylaxis is a result of procaine and/or drop-lets of medication being quickly picked up by the circulation during and after administration of procaine penicillin G. Almost immediately the patient experiences a more or less violent reaction characterized by fear, hallucinations, personality change, a sense of impending doom, and, often, seizures. In this condition, the administration of epinephrine may be somewhat hazardous. Care is directed at controlling and supporting the patient, especially if seizures are present. The condition lasts only a matter of minutes. The patient can tolerate penicillin subsequently although the author has not had the nerve to re-administer it to the several patients with this condition he has managed.

THE MYSTIQUE OF PENICILLIN G

Not surprisingly, a considerable *mystique* has developed about penicillin G in the treatment of certain infections. This mystique is usually expressed in terms of severe criticism directed against the use of anything other than penicillin G for some conditions and is usually expressed as follows:

1. "Penicillin G is by far the drug of choice for treating beta-streptococcal pharyngitis." This rule has a great body of experience and clinical study to back it up, and is conditioned mostly upon the importance of preventing post-streptococcal rheumatic fever. This concept has also led to the dictum that streptococcal pharyngitis must be treated for 10 days. However, this dogma relating to penicillin therapy might be challenged for the following reasons:
 - a. rheumatic fever has become uncommon in the US
 - b. penicillin allergy is a serious problem
 - c. erythromycin (and other oral agents) are extremely effective in the therapy of streptococcal pharyngitis.
2. "Procaine penicillin G is the preferred therapy for uncomplicated gonococcal urethritis."

Table 8
A Summary of Some Common Uses of Penicillins

Condition or Organism	Type of Penicillin	Alternatives
staphylococcal infections	penicillinase resistant	cephalosporin clindamycin vancomycin
streptococcal infections pharyngitis cutaneous	penicillin G or V	erythromycin clindamycin other penicillins cephalosporins
pneumonia	penicillin G	erythromycin cephalosporin other penicillins in high dose
meningitis	penicillin G	erythromycin chloramphenicol
viridans endocarditis	penicillin G	erythromycin vancomycin
enterococcal endocarditis	ampicillin & aminoglycoside	vancomycin
clostridia	penicillin G	tetracycline
listeria	penicillin G	
spirochete	procaine pen G or benzathine penicillin	tetracycline cephalosporin
meningococcal disease	penicillin G	chloramphenicol
gonorrhea	penicillin G or ampicillin	tetracycline spectinomycin
diphtheria	penicillin G	erythromycin clindamycin
shigella	ampicillin	tetracycline
salmonella	ampicillin	chloramphenicol trimethoprim/sulfa
<i>Hemophilus influenzae</i>	ampicillin	chloramphenicol cefamandole cefaclor
lung abscess	penicillin G	clindamycin cephalosporin
pseudomonas	carbenicillin ticarcillin plus aminoglycoside	polymyxin
urinary tract infection	ampicillin	tetracycline trimethoprim/sulfa

*certain strains are resistant

Arguments against this mystique are as follows:

- a. Tetracycline orally has always been shown to be as effective as penicillin.
- b. Tetracycline is considerably easier to administer (and less expensive in terms of personnel time).
- c. The incidence of post-gonococcal urethritis is *less* with tetracycline than with penicillin.
- d. Again, penicillin allergy is a serious problem.
3. "The semisynthetic penicillins should be used *only* to treat staphylococcal infection and gram-positive organisms (including Staphylococci) that are susceptible to penicillin G should be treated with Penicillin G". This is based on the observation that such organisms are much more susceptible to penicillin G than to

lactamase-resistant penicillins. This mystique can be challenged on the following grounds:

- a. It often leads to unreasonable regimens such as combining penicillin and a beta-lactamase resistant penicillin or cephalosporin.
- b. Such organisms are still extremely susceptible to lactamase-resistant penicillins, at a level which can be readily exceeded with parenteral therapy.
- c. Only about 10% of hospital staphylococci may be susceptible to penicillin.

Therefore in treating a suspected staphylococcal or streptococcal infection prior to identifica-

tion, a lactamase-resistant penicillin is quite appropriate. The beta-lactamase-resistant penicillins however are less active against anaerobes than is penicillin G. □

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Interferon: An Early Evaluation

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As a result of recent news, the Leukemia Society of America, Inc. received so many inquiries concerning their opinion on "Interferon," they asked two of their members to provide this early evaluation.

WHAT IT IS

Interferon is the name given to a group of chemicals, as yet undefined, which are made by several types of cells in the body in response to viruses and to some other stimuli. It is one of many substances occurring naturally in the body which are known as biological response modifiers because they regulate different components of the immune system. Interferon was first recognized as the body's front line of defense against viruses, but as research has continued, it has been found to play many other roles. One which captured scientists' imagination immediately was interferon's ability to block the reproduction of cells, a process known as mitosis.

In the search for weapons to fight leukemia and other forms of malignancy anything which stops mitosis is usually investigated to see

whether it can stop the uncontrolled proliferation that is the hallmark of malignant cells. Thus, even though no one really knows exactly what the interferons are, or how their various effects are supposed to work together to keep us healthy, the preparations that researchers know as interferon are being studied carefully for anti-neoplastic potential.

Interferon is a product of living cells. For many years the only source was in Finland, where it is painstakingly prepared from large quantities of white blood cells, stimulated by a virus, then purified. Interferon's scarcity and high cost held back research; without good evidence that it could be effective against cancer there was little incentive to produce more, or to make it cheaper. The vicious cycle was broken when the results of a study conducted in Sweden were announced. Interferon was given to bone cancer patients after surgery, and in some patients it prevented or delayed recurrence of the disease. The results were about equal to those achieved with chemotherapy during the 1970's.

The Swedish study stimulated clinical research on interferon, but no attempt has been made to corroborate the findings concerning interferon's effect on osteogenic sarcoma. Indeed, no patient with any form of cancer or leukemia has, in fact, been cured with interferon.

We hope that the clinical studies now under way at several United States institutions will reveal more about the nature of this material, and that the hopes surrounding interferon today will be rewarded. Any advance in the

fight against malignant diseases will be welcomed not only by patients and their families, but by their physicians, the research community and the general public.

Because we believe that the best clinical research is firmly grounded in evidence arising from laboratory studies, the Leukemia Society of America is presently funding basic research on interferon and on substances which stimulate its production. This research, begun in 1975, is designed to increase our understanding of interferon's anti-viral and anti-tumor actions and may, one day, provide important clues to the best way to treat patients with it.

Even if this research does not tell us about the behavior of interferon on the molecular level, no one familiar with this field would suggest that interferon is likely to be used against leukemia, or other malignancies any time soon. Nevertheless, public enthusiasm about interferon is growing fast — so fast that, we believe, some important facts are in danger of being overlooked.

First, interferon remains an *experimental material*. It is available only in experimental quantities, and can be used only on the few patients who meet the requirements of the research studies that have been set up. These studies are designed to enlighten us about interferon and its effects, rather than to cure the patients enrolled in the studies. In this way, scientists feel the limited amount of interferon available can, in the long run, benefit the most people. This is always the case with any scarce, unproven medicine, and as we shall discuss, there are good reasons for these restrictions.

Secondly, interferon is only partially understood. New results from laboratories around the world are constantly changing our ideas about it. An important step forward will come when completely pure interferon is available for clinical testing. Most clinical work done to date has used interferon preparations containing some impurities, many of which are unknown. These impurities may alter the action of interferon, or they may be responsible for some of the effects that have been attributed to interferon.

Some investigators have managed to purify small quantities of interferon and are working to analyze it so that clinicians will know just what they are working with. Several types of interferon have been identified; preliminary

evidence suggests that one recently discovered type may have a more powerful effect against malignant cells than the better-known interferon known as Type I.

HOW IT WORKS

Interferon works simultaneously in many ways, complicating the task of researchers who are trying to discover exactly what it does. It seems to increase the activity of natural killer cells, white cells in the blood which can kill enemy cells at once, without involving other parts of the immune system. Interferon also activates macrophages, the large scavenger cells which normally lie dormant in the spleen. Macrophages themselves seem to produce a kind of interferon of their own, whose role in fighting cancer and other diseases is not defined. Interferon also makes various cells produce many different chemicals — for example; it causes the release of histamine, the chemical which brings on the symptoms of allergy and which, in extreme cases, can lead to anaphylactic shock.

Animal studies show that interferon can halt the growth of tumors, and there are reports that, when injected directly into cancer nodules, interferon has some kind of direct killing effect on the malignant cells. Just how this happens is not known. Some investigators suggest that it may be caused not by interferon itself but by impurities in the preparations.

Interferon's ability to block mitosis may, or may not, be responsible for its reported effect

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on cancer cells. In any event, interferon blocks the mitosis of normal cells, and some of the cells most sensitive to this effect are essential to a properly-functioning immune system. It has been reported that interferon blocks the proliferation of both the antibody-producing B cells and the T cells which include a number of specialized groups of messenger, killer and regulatory cells. Interferon's antiproliferative effect may also extend to other kinds of white blood cells needed to fight infection.

Thirdly, interferon may not be harmless to the patient, although, as a substance produced naturally in the body, it would seem, at first glance, to be very safe. Interferon, when used in ways other than those which nature intended, may involve formidable risks which, when doses are high, may equal those of established cancer therapy.

Our bodies normally produce only a little interferon at a time. Though much larger doses are being given to cancer patients in the current studies, most investigators agree that, for really substantial anti-cancer effects, still greater doses will probably be necessary. They will probably have to be given repeatedly, over many months. It remains to be seen what large-scale, long-term treatment with interferon will do to the patient, whatever it may do to the disease.

Thus far, interferon's side effects seem to be minor — fatigue, some loss of hair, and a mild suppression of the bone marrow's ability to make new blood cells. These are precisely the same effects that occur when a patient is given very low doses of standard anti-cancer drugs. At these doses, malignant cells are scarcely affected. It is possible that, at the higher doses that would be necessary for interferon actually to cure cancer, patients might experience more intense and possibly more serious side effects.

The most significant of these are likely to include a decrease in not only white blood cells, but in red cells and platelets as well, rendering the patient susceptible to anemia and hemorrhage. Those who know the effects of established chemotherapy will recognize that all these problems arise from the suppression of the bone marrow, a familiar difficulty in treating patients with leukemia and other forms of cancer.

For the patient with myeloid leukemia, interferon may do more harm than good. Recent research shows that interferon keeps cells from maturing, keeping them in the useless "blast"

stage which is characteristic of myeloid leukemia. Whether similar problems would arise in patients with other forms of leukemia is not known.

Amid the great excitement about interferon's possible role as an anti-cancer agent, its recognized anti-viral activity has been overshadowed. Physicians who are giving interferon to cancer patients report that whether the malignancy is responding to interferon, or not, these patients develop fewer viral infections than expected. This may, in the long run, prove to be the greatest benefit that interferon can offer the cancer or the leukemia patient, for, either because of the disease, or as a result of treatment these patients are particularly vulnerable to viruses. Short term treatment with interferon might save the lives of many patients with cancer and leukemia who might otherwise be lost, not to the malignant disease, but to viruses such as herpes and cytomegalovirus.

ITS FUTURE

Neither the researchers conducting the interferon studies nor the individuals who conceived them have ever suggested that interferon is unequivocally a cure-all for cancer, or that it would have no adverse effects of any kind. In its understandable eagerness for a safe, simple, and certain treatment for cancer, however, the public has jumped to conclusions about interferon which we believe are not justified. Interferon is not a "magic bullet" against cancer, however appealing the idea may be.

We hope that the great public excitement about interferon may direct attention to the many other powerful "drugs" manufactured by the body to protect itself from disease, including cancer and leukemia. A number of these substances, such as the hormones from the thymus gland, the prostaglandins, and dozens of chemical immunity factors made by the white blood cells, are under study today, and some, such as the thymic factors, are available commercially.

Furthermore, as these substances and their roles are better defined through continuing research, it will one day be possible, perhaps, to amplify the immune response to specific diseases, stimulating the activity of certain cells while suppressing others. Missing chemicals, such as thymic hormones or specific types of

interferon, may one day be supplied to patients who lack them, as part of a rational plan.

New techniques are being developed continually. Recently, it has become possible to produce large amounts of antibodies to virtually any substance. These monoclonal antibodies, as they are called, will help greatly in the purification of biologically-produced substances, such as interferon, and the antibodies themselves may one day be used either to identify and track malignant cells, or as a means of delivering drugs, radioactive isotopes, or cell poisons directly to cancer or leukemia cells.

In the meantime, we hope that the great promise of the rapidly emerging biological approach to treating cancer will not overshadow the great strides that have been made in treating leukemia and related diseases over the past twenty years. Thanks to these developments in chemotherapy and radiation therapy, today's newly-diagnosed patient with leukemia or lymphoma does not face an automatic sentence of death.

Children with acute leukemia have a likelihood of being cured which ranges, depending on the type of leukemia, from 50 to 80 percent. A much smaller, but growing proportion of

adult patients with acute leukemia can expect to be cured. As recently as ten years ago, virtually all patients with acute leukemia died within two years.

Hodgkin disease, once universally fatal, is now one of the more curable of all cancers even among patients with far advanced disease. Many other forms of lymphoma are responding well to therapy, and some of these patients may be cured.

These results are achieved with today's best standard therapy, which thousands of patients have undergone successfully and which is being tested and refined continually. While interferon and other biological response modifiers show promise and, we believe, should continue to be investigated, we nevertheless believe that, for the leukemia and lymphoma patients of today, the best hope for long-term survival lies with established treatment regimens, supervised by experienced physicians with the resources of a major cancer center at hand.

Further information about the most advanced and reliable treatment for leukemia and related diseases can be obtained from your local chapter of the Leukemia Society of America. □

The Oklahoma State Department of Health Public Health Laboratory is participating along with ten other state laboratories in a two-year collaborative study evaluating a different method of testing for the presence of *Rickettsia rickettsii* antibodies, the causative organism of Rocky Mountain Spotted Fever (RMSF).

This procedure, a latex-*R. rickettsii* test, is being compared to the microimmuno-fluorescence (micro-IF) in a collaborating laboratory in New York state.

Specimens from individuals suspected of RMSF submitted to the OSDH lab are tested by the current method there and then a portion is forwarded to the New York State Laboratory for analysis by the two other procedures, which employ the use of antibodies for *R. rickettsii*, *R. prowazekii*, *R. typhi*, and *R. akari*.

These results of this information were returned to the OSDH lab for follow-up. Those who demonstrated the presence of the organism in question were then subjected to clinical follow-up.

In the first year a total of 3,864 sera from 2,660 patients were tested by latex-*R. rickettsii* and micro-IF. Sera from 2,225 patients were nonreactive by both tests, and 383 were reactive by both. Sera from 26 were reactive by micro-IF only and 26 by latex-*R. rickettsii* test



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only. The overall efficiency of the latex-*R. rickettsii* was 98.04 percent (specificity, 98.84 percent; sensitivity, 93.64 percent).

Of sera from the twenty-six patients which were reactive by micro-IF only, nine were confirmed recent infections; seven had had RMSF one or more years earlier; three were clinically unconfirmed; three were serologically diagnosed as typhus sera and one as *Rickettsia rhipicephali*; one had tularemia, and for the remaining two no clinical information was available.

Of sera from the twenty-six patients which were reactive by latex-*R. rickettsii* only, six were serologically diagnosed as typhus sera. For the remaining 20, no clinical information was available; they are under investigation.

This study will continue until October, 1980. At that time, all the data will be analyzed and a final determination will be made as to the use of this technique. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JUNE, 1980

DISEASE	JUNE 1980	JUNE 1979	MAY 1980	Total To Date	
				1980	1979
Amebiasis	4	1	3	20	8
Aseptic Meningitis	6	9	4	22	19
Brucellosis	—	1	—	2	1
Encephalitis, Infectious	1	4	1	4	11
Gonorrhea (Use Form ODH-228)	1143	1164	1051	6627	6175
Hepatitis A	25	18	37	204	114
Hepatitis B	15	5	21	93	40
Hepatitis Unspecified	25	23	34	144	75
Measles (Rubeola)	48	—	359	729	22
Meningococcal Infections	3	5	3	16	24
Pertussis	2	—	1	11	3
Rabies (animal)	23	38	37	155	151
Rocky Mountain Spotted Fever	8	26	11	21	29
Rubella	1	—	1	3	22
Rubella (congenital)	—	—	—	—	—
Salmonellosis	27	39	31	107	119
Shigellosis	20	16	10	92	89
Syphilis (Use Form ODH-228)	14	9	11	56	45
Tetanus	—	—	—	—	—
Tuberculosis	46	32	28	168	179
Tularemia	4	5	1	5	5
Typhoid Fever	—	—	—	1	—

Multiple Prescriptions Create Problems

The Oklahoma Pharmaceutical Association (OPhA) will focus upon its need to eliminate multiple prescriptions written by prescribers on single forms, and the burglaries of pharmacies says A. Tate Taylor, OPhA executive director.

OPhA has decided to make its resolution to eliminate multiple prescribing on one prescription blank a primary objective for the year. It is one of 27 resolutions OPhA passed at its annual convention held in June.

Taylor says multiple prescriptions create confusion for pharmacists in filing the prescriptions according to the state's laws. The pharmacists' greatest problem occurs when prescribers include controlled substances on the same blank with exempt drugs. In order to comply with the law, pharmacists must place prescriptions for controlled substances that are identified as schedule II drugs in separate files. Although prescriptions for other controlled drugs (schedules III through VI) can be filed with those for exempt drugs, the law states that even schedules III through VI must be numbered differently.

Multiple prescriptions on one blank force the pharmacists to slow down their delivery of medication to the patients. They must rewrite each prescription in order to file them properly.

"We want to cooperate with prescribers and in turn we need their cooperation in order to help them. Both of us are dedicated to the health care of patients. Our effort is meant only in a spirit of cooperation and this type of cooperation is in the patients' best interest," Taylor said.

OPhA intends to implement services that will help correct the problem. Taylor said OPhA has already sent a copy of its resolutions to the University of Oklahoma Health Sciences Center. The association is encouraging the school to educate medical students about the problem before they are graduated. OPhA is

also sending a copy of its resolution to physicians who frequently prescribe more than one drug on a prescription blank. Since June, OPhA has mailed copies of the resolution to more than 25 physicians.

Another OPhA resolution addresses the need for OPhA to take measures against the burglaries of controlled substances from pharmacies. Taylor said this type of crime has increased by 200% within the last year, and says the OPhA credits the discontinuation of the state's methadone treatment and through better enforcement, control of drug traffic on the streets as primary reasons for the increase in pharmacy burglaries. "When one source dries up, drug users will just find another source."

OPhA is directing special attention at preventing the early parole of drug offenders to discourage such burglaries. Taylor said OPhA has received promises from the offices of the District Attorney and the Attorney General that more vigorous enforcement of drug-related crimes will be emphasized. □

Researchers Throw In The Towel

Researchers are finally throwing in the towel and revising their twenty-year old premise that hard water is a protection against heart disease.

"It is certainly imperative to state that at present, setting standards for water hardness in the United States is not scientifically justifiable," one researcher said in a report cited by the *Journal of the American Medical Association*.

The researchers have decided to turn their attention away from hard-water studies because they say simple correlation, statistical and direct risk-factor studies have failed to show a consistent implication between hard water and heart disease mortality during the past two decades.

The report said a tremendous decline in coronary and cardiovascular disease occurred between 1968-1978 despite little change in the usage of hard water instead of soft water. The report said such a decline could be credited to reduced smoking, change in diet, control of

high blood pressure, exercise programs and improved medical and hospital care.

Health authorities have never really heeded the premise that soft water could cause heart disease. The report said the health authorities concluded that evidence was never strong enough to halt soft water treatment. □

New Code of Ethics Approved by AMA

It took more than two years of study and debate, but the House of Delegates of the American Medical Association recently voted to adopt a new Code of Medical Ethics, the first revision in 23 years. The action came at the Annual Meeting of the AMA which was held in July.

Revision of the Code of Ethics was first suggested at the AMA Interim Meeting in 1977. Since that time it has gradually gained support, largely because of pending lawsuits. The Federal Trade Commission ruled several years ago that the learned professions were not exempt from anti-trust laws, and since then many AMA leaders felt that a change in the Code of Ethics could not be avoided.

AMA leaders say, however, that the ethics were not changed simply because of legal challenges. James Todd, MD, Chairman of the Ad Hoc Committee on the Principles of Medical Ethics, called the new code "broad, clear, positive statements . . . emphasizing dedication to and the privacy of the patient and emphasizing individual, not collective, responsibility."

An issue of great interest to Oklahoma doctors involved lethal drug injections. Oklahoma was the first state to pass laws calling for executions to be conducted in this manner, and the question of whether or not it would be ethical for a physician to take part in such an execution immediately arose. The AMA House voted that doctors should not participate in executions but also said that "a physician may make a determination or a certification of death as currently provided by law in any situation." The House said that certification was not considered participation in the execution.

For additional information about the AMA meeting, see the August 1/8, 1980 issue of *American Medical News*. The new Code of Ethics is printed in this *Journal*.

Principles of Medical Ethics

Preamble: The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility not only to patients, but also to society, to other health professionals, and to self. The following Principles adopted by the American Medical Association are not laws, but standards of conduct which define the essentials of honorable behavior for the physician.

- I. A physician shall be dedicated to providing competent medical service with compassion and respect for human dignity.
- II. A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.
- III. A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient.
- IV. A physician shall respect the rights of patients, of colleagues, and of other health professionals, and shall safeguard patient confidences within the constraints of the law.
- V. A physician shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.
- VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical services.
- VII. A physician shall recognize a responsibility to participate in activities contributing to an improved community.

Approved July, 1980



Abbott Laboratories has recognized George L. Goodman, MD, Yukon (right) for contributing 51 years of outstanding service and dedication to medicine. Sales representative, Mr Jim Crockett (left) awarded the physician with an engraved Golden Hour Clock commemorating this occasion. □

Committee To Suggest New Approach

Members of the 1981 Annual Meeting Committee have suggested a new approach to the scientific program of next year's OSMA annual meeting.

The planning committee has suggested that more scientific seminars be held and that they be conducted for shorter lengths of time. The committee recommends that 11 thirty-minute sessions be conducted.

This new approach will provide physicians with more free time to spend with their families at Shangri-la where next year's annual meeting will be held.

In addition, the committee suggests that practical crisis situations be the general theme for the scientific program. The committee's suggestions for the seminar topics include allergic reactions, crises with cancer patients, emergency medical crises, psychological crises, pediatric emergencies, cardiology crises, multiple trauma and obstetrical/gynecologic crises. □

Institutions Conduct Laetrile Trial

Four of the nation's cancer research centers are currently involved in the country's first clinical trial to evaluate the possible effectiveness of Laetrile in the treatment of cancer.

The testing began last July under the direction of the Investigational Branch of Cancer Therapy Evaluation Program of the National Cancer Institute (NCI), Department of Health and Human Services (HHS). Authorities expect the trial to last for nearly two years.

Before the United States Food and Drug Administration would authorize such a trial, it required that toxic effects in a small number of cancer patients be tested. Last spring six patients were selected for the preliminary testing and only one experienced a toxic effect. Toxicity in this particular individual became apparent only after the patient ate raw almonds.

Before the study is over, authorities speculate that it will involve nearly 200 cancer patients. The patients are selected among individuals who have no effective treatment for their cancer. This includes patients who no longer respond to effective drugs as well as patients for whom no proven treatment exists. Each patient must have measurable cancer involving a tumor mass that can be followed through x-ray or other examinations for growth or shrinkage.

Physicians participating in the trial are Doctor Charles Moertel, Mayo Clinic in Rochester, Minnesota; Doctor Charles Young, Memorial Sloan-Kettering Cancer Center in New York; Doctor Gregory Sarna, University of California at Los Angeles Johnson Cancer Center and Doctor Stephen Jones, University of Arizona Health Sciences Center. The Mayo Clinic is coordinating the data from each of the involved institutions.

Another study will follow this trial to assess Laetrile's effectiveness in reducing pain and to measure any increase in the patient's ability to carry out normal daily functions.

Physicians having patients who are interested in participating in the Laetrile trial should contact the National Cancer Information service. The toll-free number is 800-638-6070. Eligible patients will be referred to one of the participating institutions. □

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JOINT RETURN TAXABLE INCOME	\$50,000	\$50,000	\$162,400	\$162,400
REQUIRED INVESTMENT AT 6% TO ACHIEVE \$6,000 ANNUAL INCOME	\$200,000	\$100,000	\$277,766	\$100,000
TOTAL INTEREST INCOME EARNED	\$12,000	\$6,000	\$16,666	\$6,000
FEDERAL TAX PAID	\$6,000	— 0 —	\$10,666	— 0 —
NET INCOME RETAINED	\$6,000	*\$6,000	\$6,000	*\$6,000

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Journal Offers New Service

A quick glance at a calendar of events could be just the reminder needed for what would have been a forgotten meeting. It can also serve as a communication tool for publicizing other important dates.

The Journal of the Oklahoma State Medical Association is now offering this type of calendar in its news section. It will announce the dates of various OSMA activities. In addition, physicians are encouraged to use the calendar to publicize the dates of other medically-related meetings or events that would be of interest to doctors throughout the state.

Information for the OSMA calendar of events should be submitted at least two months in advance. Contact the Oklahoma State Medical Association, 601 Northwest Expressway, Oklahoma City, OK 73118, (405) 843-9571.

NOVEMBER CALENDAR OF EVENTS

November 3

OSMAA Fall Conference, OSMA headquarters, 9:30 a.m.

November 6-8

Oklahoma Society of Internal Medicine Annual Meeting, Shangri-la.

November 12-14

The Initial Management of Medical Emergencies and Gynecological-Obstetrical Emergencies for the Primary Care and Emergency Physician, Oklahoma Children's Memorial Hospital, Ben H. Nicholson Tower, fifth floor. □

Physician Decisions Are Important To VE

In just three years doctors have contributed to helping the Voluntary Effort to save more than \$4 billion despite tremendous inflationary growth. However, physicians can still play an even greater role in further lowering health care costs.

Physicians have already voluntarily lowered their fee increases. But physician-fees represent only about 19% of the total health care dollar. Decisions that doctors make will determine the success of the Voluntary Effort in the future. Physicians are responsible for making decisions that control 50-to-80% of the health care dollar.

The following is a list of cost-containment suggestions that have been compiled by the American Medical Association.

- When referring a patient to another doctor, send all reports (lab tests, x-rays, etc) to the other physician to avoid costly duplication.

- Know the costs of diagnostic tests and x-rays.

- Know the costs of medications you prescribe.

- Schedule diagnostic tests and other procedures on an out-patient basis when possible.

- Use preprinted forms whenever possible instead of letter writing. A recent survey indicated that the estimated cost of a dictated and transcribed letter is nearly \$4.50.

- File insurance forms promptly.

- Deposit patient payments on a daily basis. Deposits to a savings account maximize the interest on the money earned.

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Antibiotics In Animal Feed Are OK Says AMA

Clinical evidence does not support the theory which claims that drug-resistant infections in animals spreading to humans says the American Medical Association.

An increasing number of people are developing a resistance to antibiotics. Some are concerned that this could be a result of humans consuming the meat or poultry of an antibiotic-fed animal. Because of this concern HR 7285 has been developed and proposes an amendment to the Federal Food, Drug and Cosmetic Act. It would further limit the use of antibiotic drugs as subtherapeutic doses in animal feed.

In an address to the Subcommittee on Health and Environment and the Committee on Interstate and Foreign Commerce, United States House of Representatives, AMA representatives said the association does not believe clinical evidence supports the need for legislation in this matter.

Proponents of the bill have cited a report which suggests the impact of antibiotics in

animal feed. However, the AMA representatives pointed out that even this report concluded that it is not possible to conduct a study on the effects of human health from the subtherapeutic use of antimicrobials in animal feeds.

The proponents of HR 7285 also express concern about other adverse reactions that are frequently caused by various antibiotics such as penicillins and tetracyclines. They say the consumption of animal protein having small residues of antibiotics could cause such reactions by developing toxicity in humans. The AMA representatives said this is unlikely because livestock producers and various government entities have very accurate scientific methods for detecting residues of drugs or other contaminants that show up in carcasses and animal byproducts. The representatives further explained that data indicate that if the residue does contain antibiotics it's usually in very small quantities. Otherwise the product is withheld from the market.

The AMA recognized that debate on this particular subject is not closed and it urged further study in this area. However, it con-

cluded that current scientific and medical evidence do not support the view that human resistance to antibiotics is effected by the sub-therapeutic use of antibiotics in animal feed. □

Functions Available To Sponsored Medical Students

Are you an Oklahoma County physician who is sponsoring the dues of a medical student? If so, the Oklahoma County Medical Society encourages you to invite the student and his or her spouse to OCMS's September dinner meeting. The meeting will be Tuesday, September 23 at 5:30 pm in the meeting room of the Home Builders Association, 625 NW Expressway.

To do so, physicians need only purchase an additional ticket for the student's spouse. The cost is \$7.50 per ticket. Student membership fees cover expenses for the sponsored student. For reservations contact the Oklahoma County Medical Society, 601 NW Expressway, 843-5619.

The student membership program involves physicians who agree to pay the dues of a medical student. The dues are \$17. This fee enables the student to participate in the functions of the Oklahoma State Medical Association as well as county medical societies.

OSMA joins OCMS in encouraging physicians participating in the student membership program to invite their sponsored student to the various functions of the state and county organizations. □

Deaths

KELLY M. WEST, MD 1925-1980

Kelly M. West, MD, 55, internationally known, University of Oklahoma Health Sciences Center professor and researcher, died in Hong Kong on July 28. At the time of his death Dr West was assisting in setting up a computerized National Medical Library for the Chinese government in his capacity as a member of the Board of Regents of the National Library of Medicine, an appointment made by President Carter in 1978.

A native of Oklahoma City, Dr West was graduated from the University of Oklahoma College of Medicine in 1948. Following postgraduate study, his practice was established in Oklahoma City. Among the many medical organizations in which he was active were the American Board of Internal Medicine, American College of Physicians, American Federation for Clinical Research, Alpha Omega Alpha, Central

Society for Clinical Research, American Therapeutic Society, American Diabetes Association and Southern Medical Association.

TOM S. GAFFORD, JR., MD 1921-1980

A prominent Muskogee pathologist, Tom S. Gafford, Jr., MD, died August 4, 1980. Born in Oklahoma City, Dr Gafford was graduated from the University of Oklahoma College of Medicine in 1947. His practice was established in Muskogee in 1950. He had served on the OSMA Board of Trustees for several years and was appointed to the State Board of Mental Health. Among other medical affiliations in which Dr Gafford was active were the American Society of Clinical Pathologists, College of American Pathologists, Oklahoma Association of Pathologists and American Rheumatism Society.

THOMAS J. HARDMAN, MD
1910-1980

Thomas J. Hardman, MD, retired, Tulsa surgeon, died July 24 in Tulsa. He was graduated from the University of Oklahoma College of Medicine in 1934 and had practiced in Tulsa for over 40 years before his retirement six years ago. In 1971, the Tulsa County Medical Society Auxiliary named Dr Hardman "Doctor of the Year" citing his contributions to the community. The same year, the OSMA recognized his service to humanity with the presentation of a Life Membership. He was certified by the American Board of Surgery.

JAMES R. COLVERT, MD
1915-1980

James R. Colvert, MD, Oklahoma City gastroenterologist, died July 22, 1980. Born in Ft Stockton, Texas, Dr Colvert moved to Oklahoma in 1922 and was graduated from the University of Oklahoma College of Medicine in 1941. His practice was established in Oklahoma City in 1947. He was a member of the faculty at his school of graduation and a Fellow of the American College of Physicians.

EMMETT O. MARTIN, MD
1897-1980

A long-time Cushing physician, Emmett O. Martin, MD, died July 15. Born in Cushing, Dr Martin was graduated from the University of Oklahoma College of Medicine in 1921. Nine years later he established his practice in Cushing. The OSMA presented him with a 50-year Pin in recognition of over fifty years of dedicated service to his profession and humanity. In 1972, the OSMA again honored Dr Martin with the presentation of a Life Membership. □

IN MEMORIAM

1979

<i>John H. Robinson, MD</i>	<i>July 30</i>
<i>Marvin Elkins, MD</i>	<i>August 20</i>
<i>Hugh J. Evans, MD</i>	<i>August 25</i>
<i>Walter H. Dersch, Jr., MD</i>	<i>August 26</i>
<i>Caspar A. Hicks, MD</i>	<i>August 27</i>
<i>William R. Schmieding, PhD</i>	<i>September 16</i>
<i>Ernest Lachman, MD</i>	<i>September 21</i>
<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>
<i>Charles H. Eads, MD</i>	<i>March 8</i>
<i>Paul C. Gallaher, MD</i>	<i>April 20</i>
<i>Ennis M. Gullatt, MD</i>	<i>April 26</i>
<i>John E. Highland, MD</i>	<i>April 28</i>
<i>H. Violet Sturgeon Minton, MD</i>	<i>April 29</i>
<i>Elton W. LeHew, MD</i>	<i>May 3</i>
<i>C. W. Arrendell, MD</i>	<i>May 6</i>
<i>Edward A. Abernethy, MD</i>	<i>May 9</i>
<i>William F. Thomas, Jr., MD</i>	<i>May 17</i>
<i>Robert C. Lawson, MD</i>	<i>May 17</i>
<i>Robert L. Lembke, MD</i>	<i>June</i>
<i>Joseph Fulcher, MD</i>	<i>July 2</i>
<i>Emmett O. Martin, MD</i>	<i>July 15</i>
<i>James R. Colvert, MD</i>	<i>July 22</i>
<i>Thomas J. Hardman, MD</i>	<i>July 24</i>
<i>Kelly M. West, MD</i>	<i>July 28</i>
<i>Tom S. Gafford, MD</i>	<i>August 4</i> □

Book Reviews

Congenital Adrenal Hyperplasia. Edited by Peter A. Lee, 532 pages, illustrated. Baltimore: University Park Press, 1977. Price \$37.50.

In the Fall of 1975, a symposium entitled "Treatment of Congenital Adrenal Hyperplasia: A Quarter of a Century Later" was held at the Johns Hopkins Hospital in Baltimore. The symposium was international in scope. This book represents the edited papers presented at the symposium. There are 115 contributors.

The book is divided into seven major sections dealing with all aspects of congenital adrenal hyperplasia. The scope of the book is broad, an attempt having been made to cover all aspects of congenital adrenal hyperplasia. Like most books dealing with the papers of symposia, the quality varies, but it is generally high. It is an excellent reference for anyone concerned with children with adrenal disorders. *Harris D. Riley, Jr., MD*

The Careful Writer: A Modern Guide to English Usage. By Theodore M. Bernstein, 487 pages. New York: Atheneum, 1977. Price \$7.95 (paper).

This book, originally published in 1965, has stood the test of time and has proved to be a welcome reference for editors and for writers. Bernstein uses the general format of the standard reference *Modern English Usage* by Fowler and discusses various troublesome words and expressions. These are listed alphabetically, making them easier to look up and identify. He provides opinions on the correctness and advisability of different usages as well as the opinions of other authorities. The book is a particularly valuable reference source for those who want answers to specific stylistic or grammatical problems. It also makes for enjoyable reading for those interested in medical writing or language. *Harris D. Riley, Jr., MD*

Medicine and Slavery. The Diseases and Health Care of Blacks in Antebellum, Virginia. By Todd L. Savitt. Urbana: University of Illinois Press, 1978. 332 pages. Price \$15.00.

The more or less traditional view of health among slaves was established by Professor Ulrich B. Phillips many years ago. He argued that slaves were more susceptible to certain diseases than were whites and were more immune to certain others. Phillips and most other historians were simply repeating the statements of antebellum owners and physicians, but nonetheless were closer to the truth than are some of the more modern revisionist historians. Phillips, Postell and certain other historians concluded that slaves, since they were valuable property, received medical care of essentially the same calibre as that of the average white. In recent years this view has been challenged, but *Medicine and Slavery* is the first systematic effort to prove or disprove this thesis.

Todd L. Savitt has produced the most detailed and comprehensive study of slave health to appear so far. Most prior historians have concerned themselves largely with the major contagious disorders among plantation slaves. However, Savitt examines virtually all aspects of health among both rural and urban slaves. The author brings an interesting background which well equips him for this work. He initially enrolled in medical school at the University of Rochester in 1965, but opted for a career in the history of medicine.

Almost every knowledgeable observer of slaves noted that, in their reaction to certain diseases, blacks differed from whites. Some modern historians have disagreed, attributing the differences to the poor conditions of slave life. A prominent historian wrote a few years ago: "Disease did not discriminate among men because of the color of their skins." In fact, it did then and it still does. Savitt uses his background in medicine and history and an extensive survey of medical literature to demonstrate that in terms of a variety of biologic factors considerable variation does exist between blacks and whites. He points out with solid evidence that medical differences rather than medical inferiority exists. The book is divided into nine chapters with a final interesting section, "Afterword: Medicine, Slavery and the Historian." There are numerous illustrations, and some 17 tables providing different statisti-

cal data. The volume is well referenced with abundant and pertinent footnotes.

The health of slaves closely paralleled the owner's generosity and concern because it was obviously influenced by the quality of housing, clothing, and other environmental factors as well as medical care. The author's approach is to describe medical problems in the context of the environment of the slave. In the first chapter entitled "Were Blacks Medically Different from Whites?", he reviews the history and evidence to show that there were significant differences; for example, blacks are more resistant to malaria and to yellow fever than are Caucasians. He also develops well the thesis that blacks were more resistant to heat but more susceptible to cold injury than were whites. In the chapter on slave quarters he demonstrates how the characteristic crowding and poor environmental conditions contributed to the onset and spread of disease of various types. The lack of privies in rural areas insured a high rate of intestinal infections. Savitt also believes that the standard diet provided for slaves was nutritionally inadequate, but the amount and quality of food clearly depended upon the individual slave owner.

Medical care usually began with the master, mistress, or overseer administering home remedies, the first resort in virtually all cases. When these treatments failed, a physician, either orthodox or unorthodox, was summoned, but frequently not until the person was beyond help. A surprising number of slaves relied upon black medicines and black practitioners. Many of the latter combined African herbal remedies and voodoo medicine while others modified African methods to include the prevailing white practices. The author concludes that blacks in one capacity or another played a significant role in health care for both blacks and whites in Virginia.

In succeeding chapters, Savitt reviews a variety of medical problems such as infant mortality, various disorders of the female, insanity, tumors and malignancies, the effects of whipping and other topics.

This book represents an important contribution to scientific knowledge not only of the health care of slaves but of the biology and diseases of blacks. Its focus on the health care of blacks in Virginia from the Revolution to the Civil War does not prevent it from being representative of the entire American slaveholding area. The author shows imagination in

his development of the factors affecting slave health. This book represents an important contribution to our understanding of this topic.
Harris D. Riley, Jr., MD

Humanism and the Physician. By Edmund D. Pellegrino. Knoxville: University of Tennessee Press, 1979. Pages XIII, 248, Index, References, \$15.00.

This book is a collection of 14 essays by Edmund Pellegrino, a physician who is a prominent advocate for a tighter linkage of humanities and medicine.

Few remedies are prescribed more enthusiastically or universally for the perceived ills of modern medicine than frequent and large doses of "humanism." A resurgence of this concept can be predicted whenever the physician's technological capabilities threaten to obscure his traditional human concern. On the other hand, few concepts are more paradoxically or differently interpreted, or more in need of critical reassessment. These essays examine various aspects of the concept of medical humanism.

Doctor Pellegrino analyzes medical practice, ethics, and education in this book. Although each of the essays addresses a different topic, they are connected by a common theme. This theme embodies a unified view of medicine which is both scientific and humane. It is divided into three major sections. Part I, made up of five chapters, deals with the relationship of medicine and the humanities, and especially medicine and philosophy, with emphasis on the similarities and dependence of one on the other. As medicine has increased in effectiveness by curing disease, it seems to its critics to have lost its person-oriented perspective. The author, although he finds much in the humanities which addresses many of the complaints about modern medicine, does not advocate retreat to a non-scientific model of medicine. Instead, he recommends a threefold use of the humanities in all phases of medical education and delivery of health care: (1) they are essential to understanding ethical and value questions in clinical decisions (medicine can be viewed as the most humane of the sciences or the most scientific of the humanities); (2) they are indispensable to critical self-examination by the profession; (3) they provide

the characteristics of the educated as opposed to the merely trained person.

Pellegrino emphasizes the distinction between "humane" and the "humanities." He states, "The humanities will not of themselves teach values. This is a common misconception of their too-ardent protagonists. But they can show us how to reflect critically on our decisions and their impact on the personal integrity of those we serve."

Part II, "Humanism and Medical Ethics," explores medicine and ethics. It critically re-evaluates the Hippocratic ethic, concludes that it represents one of the most admirable codes in the history of man, but that some of its major proscriptions are frequently compromised today. It attempts a reconstitution of a more comprehensive medical ethic, built upon the precepts of the Hippocratic Corpus, better suited for medicine with the approach of the twenty-first century. The chapter, "Hospitals as Moral Agents," contains interesting reading for all who are associated with such institutions.

Section III deals with humanistic medical education on both intellectual and emotional levels. The author stresses the concept that if humane physicians are to be produced, education itself must be humane. Thus, moral attention to the educational process itself must be combined with attempts to incorporate the humanities within the process. He repeatedly stresses the role of humanism in equipping the physician to examine values and ethics.

Out of the three sections emerges a unifying theme — the mutual relevance of the concepts of humanism in medicine in the twentieth century. Pellegrino does not offer humanism as a panacea. He argues that a true liberal education, clearly understood, is the strongest safeguard of a democratic society against the potential tyranny of its own experts.

The volume concludes with a nine-page Epilogue, "To Be a Physician." In this, he expresses his view of what it is to be a physician by re-examining certain basic concepts.

The reader will find in this well-written volume fascinating philosophical insights about medicine, assessments of professional obligations, and an approach to instill the humanities into medical education more effectively. Pellegrino's reflections on the vital question of values issues a challenge not only

to practitioners, academicians, health care institutions, but also to anyone interested in societal issues and values. *Harris D. Riley, Jr., MD*

Cope's Early Diagnosis of the Acute Abdomen. 15th Edition. Revised by William Silen. New York: Oxford University Press, 1979. 280 pages. Price \$13.95.

The 15th edition of this classic retains the heavy emphasis on clinical diagnosis and maintains the general approach and organization of earlier editions. However, there are new observations included such as the effect of adrenal steroids on abdominal pain and a discussion of newer entities and diagnostic techniques. However, the general style of the book continues to provide emphasis on practical clinical problems. Newer chapters review up-to-date concepts about the different varieties of acute mesenteric ischemia and the role of injury as the cause of acute abdominal pain.

This edition brings this splendid small book up-to-date. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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Wrongful (?) Life

Not long ago an appellate court in Michigan upheld a damage award of \$95,000 because of a pregnancy which followed the failure of physicians to perform a sterilization procedure which had been requested. This and similar cases have been termed "wrongful life" suits and it is predicted that they will increase in the near future.

Many, many aspects of this case are bewildering to those of us without legal minds or training in law, especially when the details of the case are unknown, but the very name which designates the category of the suits is bewildering, also.

Can a life be wrongful? Does the fact that a life is — initially at least — unwanted by a mother and/or a father mean that it is wrongful? And what is it that is wrongful — the life or the lack of wanting the life? The question is similar to the one asked about illegitimate children; is it the child or the parentage that is illegitimate? The potential ramifications of this example of apparent judicial folly are endless. For instance:

In the event of the parents' death or defection, does the unexpended balance of the award go to the child, the court or the ultimate guardian?

If the child begins providing his own support before or at the time it reaches majority age, is it entitled to the residual balance of the award?

If the death of any individual is prevented through the application of cardiopulmonary resuscitation techniques but competent life is never restored, do the individuals who were instrumental in preventing the death stand in significant jeopardy of being required to contribute to the support of the dependent victim if the family files a wrongful life suit?

In the event of a mother bearing more than one child following the therapeutic administration of fertility agents, is there a reasonable chance of the physicians who prescribed the agent (and the manufacturer of the agent) being forced to support those children not wanted by the parents who claim that the second, third and fourth babies were not wanted?

If a life is truly wrongful (therefore unwanted?) can a conscientious judiciary permit the injured parent to retain legal guardianship without materially contributing to the hazards of such a disposition?

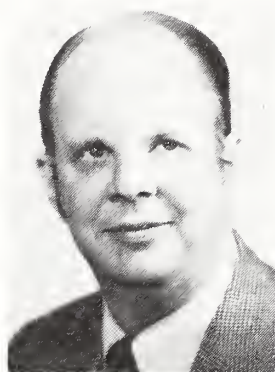
Ad infinitum

I must assume that our courts no longer consider that the miracle of life is divine and that the creation of life is no longer an act of God. To decree that a death is someone's fault is understandable.

To decree that a life can be someone's *fault* is totally beyond my comprehension. And I hope it stays that way.

MRJ

It is frequently said that medical journals that are published monthly seem to appear on your desk each week, and those that are published weekly arrive daily. Certainly no other profession has as many journals, newspapers, newsletters, magazines, "brief notes," and books published for its members as does the medical profession.



My favorite method of continuing my medical education is through small meetings and reading journals. However, I have days of paranoia with strong guilt feelings when six or seven journals appear simultaneously, as I know that I will not be able to read each one entirely. Also, I know my personal habits are such that if a journal is not read within approximately forty-eight hours it will not be read at all. Instead, will be replaced by additional publications . . . all competing for my attention.

In one of my days of paranoia I decided to actually find out how many journals I received each month. This happened to be in May, the month in which I assumed the position for which I am writing this article, in yet, another journal. During May, I received thirty-four journals and twenty-nine other publications

consisting of six pages or more (newspapers, newsletters, etc). Only two of the publications came by actual subscription! Thirty-one periodicals came as a benefit of membership in various organizations and the majority of the others were unsolicited.

Each of us have our favorite journals which we will read from cover to cover. Others receive a glance before they are discarded. It has taken me about 15 years of dealing with my compulsive nature to be able to throw away a few publications without opening them.

It would seem to me that we already have too many journals, but new ones are being published all the time. The real problem in the plethora of medical literature is to separate the truly significant from the relatively unimportant material. Doctor Bill Leebron, our immediate past-president, suggested this last year and advised that the summaries of current medical information appearing in the JAMA are quite helpful. I agree.

Drop me a note at 601 N.W. Expressway, Oklahoma City, OK 73118 and tell me which journals you read and why. If we get enough response we'll publish the results.

Lloyd J. Miller, MD

DSM-III: Leaving the Darkness Unobscured

JAMES R. ALLEN, MD

The third revision of the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders is now official nosology.

It is a document of considerable legal and economic consequence, and the purpose of this paper is to delineate the major categories and critique their implications.

In January, 1980, the third revision of The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* became official nosology. The goal of the Task Force on Nomenclature and Statistics, which produced the document, was the development of a system of classification which would be reliable, useful, non-theoretical, generally acceptable, yet compatible with current knowledge and with the International Classification of Diseases (I.C.D.-9).

As a reconceptualization of diagnostic practice and a document of considerable legal and economic consequence, this new classification should be of interest to all health professionals.

It is the purpose of this paper to delineate the major categories of the system, and to highlight and critique their implications.

Some psychiatric diagnosticians contend that all attempts to distinguish different clinical syndromes on the basis of overt symptomatology are futile. From their point of view, mental illness is a single abnormality, the external manifestations of which vary quantitatively rather than qualitatively, and are therefore likely to respond to the same kinds of treatment. Others believe that such a position is comparable to regarding all cases of blindness as identical. Clinicians who hold this view contend that classification is a fundamental, quantitative study of phenomenon, the basis of all scientific generalizations, and, therefore, of effective and rational treatment. This was the position of the Task Force.

It is not generally appreciated how recently we have had an officially recognized classification of mental disorders in the United States. It was not until 1934 that the American Medical Association issued its *Standard Classified Nomenclature of Disease*. This was designed for the classification of chronic inpatients and, as such, was inadequate for the psychiatric casualties of World War II. In an attempt to fill the void, the Veterans Administration and the military services developed separate and competing systems. With the publication of the International Classification of Disease, confusion was complete, and the United States Public

Health Service commissioned a working party to develop yet another classification. This document was published in 1952, as *The Diagnostic and Statistical Manual (DSM-I)* but it was not accepted everywhere, even in the United States. In 1965, the American Psychiatric Association issued a revised diagnostic manual, (*DSM-II*), compatible with the I.C.D.-8. *DSM-III* is the most recent revision — a revision so radically different that it makes all of our standard textbooks of psychiatry obsolete.

One of the major advances in the *DSM-III* is the introduction of a multiaxial system of classification.¹ This legacy from child psychiatry provides for the evaluation of the patient's condition in terms of several variables or axes. These axes are conceptualized as quasi-independent of each other. One advantage of such an evaluation is its comprehensiveness: It allows the inclusion of non-diagnostic data that are of importance for treatment and for the identification of possible etiologic and prognostic factors. In addition, separating various aspects of the diagnostic information onto separate axes promotes diagnostic agreement between clinicians. Conceptually, this is a radical departure from making only a single formal diagnosis, as was the custom with *DSM-II*.

Each patient is now diagnosed along five axes. These are:

1. Clinical psychiatric syndrome.
2. Personality disorder, specific personality traits, or (in the case of children) developmental disorder.
3. Physical conditions believed etiologic (eg, specific liver or kidney disease in some cases organic brain syndrome), or relevant to treatment (eg, diabetes mellitus in a rebellious adolescent).

When multiple diagnoses are made on any axis, they are listed in accordance with the immediacy of the attention they require.

4. Severity of psychosocial stressors.

This is quantified on a scale from 1 (none) to 7 (catastrophic). These stresses should be relevant to the development or the course of the major disorder, and should be graded in terms of how a hypothetically normal person would be expected to react.

5. Highest level of functioning during the previous year.

This evaluation, which must include the

leisure as well as the occupational and social portions of the patient's life, is rated on a scale of 1 (superior) to 7 (grossly impaired).

Axes 4 and 5 correlate with prognosis. Because insurance forms are often made available to employers however, the Confidentiality Committee of the American Psychiatric Association has suggested that they be optional.

OPERATIONAL DIAGNOSTIC CRITERIA

Another major but controversial feature of this classification is the use of specific diagnostic criteria for each disorder.³ These criteria are meant as guidelines, not as a strait-jacket. The usual format includes:

1. Essential core symptoms
2. Associated characteristic symptoms, of which a predetermined number must be present
3. Necessary duration (eg, two weeks for a major depressive disorder or six months for schizophrenia)
4. Exclusion criteria (that is, symptoms which must not be present)

The specificity of these criteria has led to increased reliability in diagnosis, a major problem with previous nosological systems. In field trials involving over 1,200 patients and 550 clinicians, the kappa coefficients of agreement were high in comparison with other systems: schizophrenia .80, and affective disorder .50-.70. Using *DSM-II*, the kappa scores for schizophrenia were .55-.57 and for the affective disorders .26-.37.³

Unfortunately, the fact that we can now make a diagnosis with good inter-tester reliability does not mean that what we diagnose is a valid entity. Task Force members used what data they had. Some of it was hard, but some of it was very soft. Consequently, the sensitivity, specificity and predictive ability of these categories is yet to be fully determined.

ADDITIONAL FEATURES

In developing this classification, the Task Force explicitly avoided a number of assumptions which they believed false. These are:

1. All mental disorders are understandable at a biological level.

Only the organic brain disorders and brain syndromes are conceptualized as organic in origin. Schizophrenia and the affective disorders are not considered necessarily to be organic, a view which may not be greeted with enthusiasm in certain quarters.

2. Disorders are discrete and homogeneous.

DSM-III does not imply that there is any clear cut-off point between different disorders.

3. Individuals are classified.

This is a classification for disorders which individuals have. Consequently, it is inappropriate to speak of "schizophrenics" or "alcoholics." This view has particularly angered members of Alcoholics Anonymous.

4. Mental disorders are the only appropriate focus for professional attention.

Problems and conditions listed under the "V Code" which is used for "no mental disorder" may be the appropriate, and indeed, the most important nexus for therapeutic intervention. This group includes marital, parent-child, phase-of-life, academic and occupational problems, uncomplicated bereavement and non-compliance with medical treatment. Recent estimates place the national rate of non-compliance with drug prescriptions at 50%. In about half of these cases, this may result in a significant threat to the patient's health. For physicians to withdraw from these areas may be a clear violation of our Hippocratic Oath. It is moot, however, whether third-party payers will find the treatment of these problems acceptable for reimbursement.

Unlike their predecessors, the authors of *DSM-III* took a brave but precarious step: They have attempted to define "mental disorders," describing them as clinically significant behavior or psychiatric syndromes or patterns which occur in individuals, are associated with distress or disability, and in which there is inferred dysfunction at the behavioral, psychological or biological level. This emphasis on distress (symptom) or dysfunction (impairment in functioning) excludes ego-syntonic homosexuality. The emphasis on the individual excludes pathological functioning of dyadic and family units. However, this emphasis on the individual is no way intended to imply that the dysfunction is necessarily at a biological level. For this reason, the terms "illness" and "disease" are not used.

THE MAJOR GROUPINGS AXIS I DISORDERS

A. Symptoms Suggesting Physical Illness

The classification of psychophysiologic disorders in *DSM-II* had significant and practical shortcomings. The choice between an "organic" and a psychophysiologic diagnosis was often

idiosyncratic. For example, one patient might be given a diagnosis of psychophysiologic disorder and the next a diagnosis of gastritis when, in fact, they both had the same condition. This may have decreased collaboration among specialists. The classification was deficient in that it referred only to causation. There was no way to describe how psychological factors might prolong or exacerbate a physical condition. It perpetuated a simplistic, unicausal idea of disease, implying single psychological deficit. It had low inter-tester reliability. Finally, it was not commonly used.

DSM-III presents us with a new method of classifying disorders which suggest a physical illness but in which psychological factors are judged to be of importance.^{4,5} This group is divided into three subdivisions:

1. Somatoform Disorders

Patients with any of the somatoform disorders have physical symptoms suggestive of physical disorders but no discernible organic findings or pathophysiology. The symptoms are linked to psychological factors and are not under voluntary control.

There are five subtypes:

a. Somatization Disorders (Briquet's Syndrome)

These patients are characterized by the presence of recurrent, multiple physical complaints with no known organic basis, but of such severity as to cause them to seek medical advice or to take medication. They present with dramatic, vague and complicated medical histories and with symptoms which began prior to 25 years of age. The diagnosis requires a minimum of at least one reported manifestation from at least five of six groups for women, and four of five groups for men.

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b. Conversion Disorder

These patients are characterized by alterations in physical functioning due to psychological factors. The symptoms are not under voluntary control (as opposed to factitious disorders and malingering), not limited to pain alone, and are not due to somatization disorder or to schizophrenia.

c. Psychogenic Pain Disorder

These patients are characterized by the presence of severe and prolonged pain for which either no organic pathology or pathophysiology can be found, or of an intensity which is out of keeping with any existing organic lesion.

d. Hypochondriasis

These patients are characterized by unrealistic interpretations of their signs and symptoms and by fears of illness and death which persist despite assurances of well-being. The disorder must be severe enough to produce impairment in social or occupational functioning. This distinguishes them from people who merely complain.

e. Atypical Somatoform Disorder

This final grouping is for a diverse group of patients, such as those with dysmorphophobia, who do not fit into any of the above categories.

2. *Factitious Disorders*

These disorders are characterized by the voluntary production of symptoms or signs suggestive of physical disorder, but where there is no obvious recognizable environmental reward other than that of assuming the role of a patient. It is believed that these patients are deeply disturbed.

3. *Psychological Factors Affecting Physical Conditions*

In these disorders, there is demonstrable organic pathology or known pathophysiology. However, psychological factors are believed to have a role in the initiation, exacerbation or maintenance of symptoms.

MALINGERING

Malingering is the voluntary production of signs and symptoms suggestive of physical disorder. It is characterized by obvious and clear environmental gain (as opposed to the factitious disorders). Malingering is not itself considered a mental disorder. However, those who

maligner may have an underlying personality disorder.

This new classification is in keeping with psychiatry's new humility in the area of psychosomatic medicine, and may bring psychiatrists into a closer working relationship with primary care physicians. It is, in a way, a tombstone to the "golden age of psychosomatic medicine," Franz Alexander and those classical psychosomatic illnesses once known as the "Chicago 7." It marks a return to the psychobiologic approach which was prominent in the 30's but which, with the retirement of Meyer, White, Jelliffe and Draper and the fall of Flanders Dunbar, withered away. Perhaps nowhere else in the classification, however, is the poverty of an approach which avoids psychodynamics more evident.

The retrieval of Briquet's Syndrome from the nosological trash heaps of the 19th century may be particularly unfortunate. Dynamically-oriented physicians recognize that at least some of these patients are better treated as unresolved mourning reactions. The labeling of them as having "Briquet's Syndrome" may provide only a pseudo-scientific justification for their designation and treatment as "crocks," and encourage an iatrogenic crystallization of their symptomatology.

The inclusion of a specific group for psychological factors affecting physical conditions is an important innovation. Changing patterns of mortality and morbidity reflect the fact that five of the six leading causes of death in the United States today (diseases of the heart and blood vessels, cancer, accidents, diabetes mellitus, and cirrhosis) are related to life-style, as are the major causes of disability (cardiovascular disease, accidents and chronic obstructive pulmonary disease). For these patients, there is persuasive evidence, that life-style change can result in direct health benefit.¹⁸

Diagnoses of this group of disorders have only fair inter-tester reliability, the kappa scores being in the range of .42. Although this is an improvement over the results of reliability studies for the psychophysiologic disorders of *DSM-II*, it gives us cause to be humble.

B. *Organic Mental Disorders*

These disorders are characterized by psychological or behavior abnormalities caused by brain dysfunction. They are subdivided into two types:

1. *Organic Mental Disorders*

The etiology of these disorders is apparent from the findings in the examination or laboratory tests.

a. Primary Degenerative Dementias

b. Substance-induced Organic Mental Disorders:

- (i) Intoxication
- (ii) Withdrawal
- (iii) Withdrawal Delirium
- (iv) Amnestic Disorder
- (v) Delusional Disorder
- (vi) Hallucinoses
- (vii) Affective Disorder
- (viii) Personality Disorder
- (ix) Dementia
- (x) Mixed Organic Disorder

2. Organic Brain Syndromes

In this group, the relevant etiological processes are either unknown or noted as an additional diagnosis from outside the mental disorders section; eg, a specific endocrinopathy or anemia.

- a. Delirium
- b. Dementia
- c. Amnestic Syndrome
- d. Organic Hallucinoses
- e. Organic Affective Syndrome
- f. Organic Personality Syndrome
- g. Atypical or Mixed Organic Brain Syndrome

This classification takes into account the fact that there are many organic syndromes, from those with global dysfunction to those with localized deficits. The nine recognized syndromes allow the clinician more accurately to describe the patient than was possible using *DSM-II*, especially since it is possible to use more than one. *DSM-II*'s idiosyncratic use of the terms "acute" and "chronic," "psychotic" and "non-psychotic" has been dropped.⁷

C. Substance Use Disorders

These disorders are subdivided into two categories: substance abuse and substance dependency.

1. Substance Abuse

This is characterized by:

- a. Use for one month or longer
- b. Social complications
- c. Psychological dependence or pathological pattern of use

Psychological dependence is manifested in a compelling desire to use the substance, inability to cut down, or by repeated efforts to re-

strict use. A pathological pattern of use is manifested in remaining intoxicated throughout the day, using the substance nearly every day for at least one month, or in two or more episodes of complication.

2. Substance Dependency

This is characterized by tolerance or withdrawal.

Substance use disorders are no longer lumped together under the personality disorders as they were in *DSM-II*. This is in keeping with our current idea that there is no addictive personality. Certain subcategories remain highly controversial: Cannabis dependence is not accepted by all, and many a smoker is not pleased to find he meets the criteria for tobacco dependence!

People who develop a substance-induced organic brain disorder will receive at least two diagnoses on Axis I: a diagnosis of a specific substance-induced disorder, such as delirium, and a diagnosis of substance abuse or dependency.

D. Affective Disorders

In delineating these disorders, the Task Force had to confront many controversial issues.

First, it was necessary to agree on the limits of the concept of depression. The term has been used to describe everything from the common cold of psychiatric illnesses to major disability. This issue was resolved by defining a "depressive episode" as characterized by:

- (1) A core dysphoric mood
- (2) A set of eight characteristic symptoms, of which the patient must have four:
 - a. poor appetite or weight loss or increased appetite and weight gain
 - b. insomnia or excessive sleep
 - c. loss of energy or fatigability
 - d. psychomotor agitation or retardation
 - e. loss of interest or pleasure in usual interests or decrease in sexual drive
 - f. feelings of self-reproach or inappropriate guilt
 - g. complaints of diminished ability to think or concentrate
 - h. recurrent thoughts of death or suicide

- (3) Duration of at least two weeks

- (4) No evidence of organicity, schizophrenia, schizophreniform disorder, a paranoid disorder or uncomplicated bereavement

Members of the Task Force were also forced to decide whether to treat depression as a

single disorder with differences only in intensity, as two disorders, or as multiple disorders. English psychiatrists in particular have looked askance at the official sanction *DSM-II* gave to the idea that there are numerous types of depression. Yet, current pharmacologic research certainly gives clear evidence of differential response to medication. The Task Force chose to use multiple groupings, the subtyping being made on the basis of longitudinal course and cross-sectional phenomenology.^{8, 10} These are:

1. *Major Affective Disorders*

This grouping is for disorders involving either a manic episode (bipolar disorder) or a major depressive episode.

a. Bipolar Disorder

- (i) Mixed
- (ii) Manic
- (iii) Depressed

b. Major Depression

- (i) Single episode
- (ii) Recurrent

These disorders may be subclassified as:

- (1) Without melancholia
- (2) With melancholia
- (3) With psychotic features

The distinction between depressions with melancholia and those without is important: Patients with melancholia will respond best to antidepressant medication. Melancholia, in this sense, refers to such significant features as psychomotor retardation or agitation, excessive guilt, early morning awakening, weight loss, worsening of symptoms in the early morning, and lack of reactivity to environmental change. In previous literature, these symptoms were referred to as "endogenous." This term is specifically avoided in *DSM-III*, however, because it has been used to imply a biological etiology.

2. *Other Specific Affective Disorders*

This grouping is for mild and chronic disorders. It remains controversial, for there are many other ways to subdivide these lesser or minor depressions. The *DSM-III* classification is:

- a. Cyclothymic Disorder
- b. Dysthymic Disorder (Depressive Neurosis)

3. *Atypical Affective Disorders*

- a. Atypical Bipolar Disorder

b. Atypical Depressive Disorder

It remains to be seen whether this classification is sufficient or whether other concepts, such as "hysteroid dysphoria" or "bipolar II," as described in the literature on monoamine oxidase inhibitors, should be reintroduced.

It should be noted that several other disorders with mood disturbances are listed elsewhere in the classification. These include:

- (1) Organic Affective Syndrome
- (2) Adjustment Disorder with Depression
- (3) Shizoaffective Disorder
- (4) Uncomplicated Bereavement

E. *Schizophrenia and Related Disorders*

The shortcomings of *DSM-II* were nowhere more glaring than in the classification of schizophrenia.¹¹ The descriptive terms were vague and the criteria applied so inconsistently and over-frequently that even research studies which used this classification were often unintelligible.

The *DSM-III* classifies as schizophrenic only those patients who in the past were called "process" or "nuclear" schizophrenics.¹¹ It specifically excludes brief psychotic episodes and episodes with clear environmental precipitants. These latter groups are now classified as schizophreniform disorders or brief reactive psychoses.

For a diagnosis of schizophrenic disorder, there must be continuous signs of the illness for at least six months. Those who do not meet all these criteria are classified as schizophreniform disorder or brief reactive psychosis.

The major diagnostic issues in this section of the classification are:

1. *Including psychotic features*

An actively psychotic phase is required for the diagnosis of schizophrenia. People who, in the past, were classified as latent, borderline, or simple forms of schizophrenia will probably now be classified as borderline or schizotypal personality.¹²

2. *Including characteristic schizophrenic symptoms*

These symptoms require much more careful discrimination than was necessary for *DSM-II*. Not all thinking disorders, delusions or hallucinations meet the necessary criteria, and no one symptom is considered pathognomic.

3. *Excluding organic syndromes*

Psychoses associated with temporal lobe disorders or hallucinogens make this distinction much more difficult than we formerly assumed.

4. *Excluding disorders which begin after the usual period at risk*

People who become psychotic after the age of 45 years of age will be classified as atypical psychosis.

5. *Delineating the concept of schizoaffective disorder*

This is the most problematic group in the nosology. Evidence from genetics, long-term outcome studies, and treatment response suggests that these patients may form a separate group or groups. Psychotic features, even catatonic phenomena and mood-incongruent delusions or hallucinations, however, may occur in the major affective syndromes. Indeed, recent research has shown that manic patients are frequently misdiagnosed as schizophrenic. Because of the resulting controversy, this category remains the only one for which it was impossible to reach any consensus on diagnostic criteria.

F. *Irrational Anxiety and Avoidance Behavior*

The authors of *DSM-I* accepted anxiety as the chief characteristic of the psychoneurotic disorders. The way in which a person handled this anxiety was believed to result in the various reactions which comprised the specific psychoneurotic disorders. In the last two decades, however, most clinicians have treated these patients as if anxiety had little role in the development of their disorder. In addition, psychoanalysts have introduced additional explanatory ideas, as have behaviorists and existentialists.

DSM-III has limited itself to conditions in which anxiety is the predominant symptom or arises when the patient attempts to master specific symptoms. These conditions are subdivided as follows:

1. *Phobic Disorders*

a. *Agoraphobia*

These individuals avoid going alone into public places, and are crippled by increasing constriction of their daily activities. This disorder is subdivided into those patients with panic attacks and those without. This distinction is important pharmacologically: Those with panic attacks can be expected to respond favorably to antidepressant medication.^{12, 14}

b. *Social Phobia*

This condition is characterized by avoidance of situations where one expects to be exposed to scrutiny or to embarrassment.

c. *Simple Phobias*

2. *Anxiety States*

This disorder is characterized by at least three of the following:

- (1) motor tension
- (2) autonomic hyperactivity
- (3) apprehensive expectation
- (4) vigilant scanning

These signs and symptoms must be continuous for at least one month, and not due to any other mental disorder or physical disorder. If the symptoms are secondary to some physical disease, such as hyperthyroidism, the medical diagnosis alone is listed on Axis III.

Anxiety states are subcategorized into five groupings:

- a. *Generalized Anxiety Disorder*
- b. *Panic Disorder*

This is characterized by at least three panic attacks within a three-week period.

c. *Obsessive Compulsive Disorder*

This disorder is classified in this section because when patients try to control their symptoms, they are flooded with anxiety.

d. *Post-traumatic Stress Disorder*

e. *Atypical Anxiety Disorder*

G. *Adjustment Disorders*

This group of disorders is characterized by a change in functioning due to some identifiable psychosocial stress. The maladaptive nature of the change is indicated by the presence either of impairment in social or occupational functioning or by symptoms which seem excessive to the stress. The change cannot be merely an exacerbation of one of the other mental disorders and must not meet the diagnostic criteria for another mental disorder or for uncomplicated bereavement.

H. *Disorders of Infancy, Childhood, and Adolescence*

1. *Mental Retardation*

For this diagnosis, children must show functional as well as intellectual impairment. The borderline group (I.Q. - 71 to 84) has been placed under "V Code" (no mental disorder) because few of these children manifest problems in adjustment, and minority groups are over-represented among them.¹⁵ This change is in keeping with the American Association of Mental Retardation's *Manual on Terminology and Classification of Mental Retardation*.

2. *Pervasive Development Disorders*

This new subgroup refers to children who are unable to acquire skills in a number of areas — social, emotional, and developmental. In the

past, most of these children would have been labeled "atypical ego developmental" or "psychotic." Because it seems a distinct disorder, early infantile autism has been singled out as a separate sub-group.

3. Children in trouble with society

Children with "behavior disorders" are subdivided into three groups:

- a. Attention Deficit Disorders
 - with hyperactivity
 - without hyperactivity
 - socialized
 - aggressive
 - non-aggressive
- b. Conduct Disorders
 - unsocialized
 - aggressive
 - non-aggressive
- c. Oppositional Disorder

4. Anxiety Disorders

This grouping of disorders is subdivided into three:

- a. Separation Anxiety Disorder
- b. Avoidant Disorder
- c. Overanxious Disorder

Children with the avoidant disorder are characterized by extreme and dysfunctional shyness: They would like to participate with others but are afraid. Children with the overanxious disorder, in contrast, are characterized by excessive worrying and fearful behavior not focused on any specific object or event, such as separation from a parent.

5. Physical Disorders

This group includes an assortment of stereotyped movement disorders, eating disorders and other disorders such as stuttering, functional enuresis and encopreses, sleepwalking and sleep terror.

This classification of disorders of infancy, childhood and adolescence is perhaps the weakest section of *DSM-III*. It is expected that factor-analytic studies of symptoms checklists will reveal very different clusterings.

I. Sexual Disorders

1. Psychosexual Disorders

The classification of these disorders is the most successful in the nosology, for it is based on current knowledge of the three separate stages of the sexual response. It subdivides psychosexual disorders into those of the desire phase, the excitement phase and the orgasmic phase.

2. Ego-dystonic Homosexuality

This diagnosis is still the center of a maelstrom of controversy and polemics. The past fury of the American Psychiatric Association's (APA) vote on whether ego-syntonic homosexuality is or is not pathological has been resolved by letting the patient decide: If his sexuality causes him no problems, it is treated as a normal variant, like left-handedness.

Quite apart from arguments involving teleology and the survival of the race, it has become increasingly evident that highly motivated homosexuals have a good chance of changing their sexual orientation. Masters and Johnson's cure rate of 60% has now been substantiated by other groups. The younger the patient when treatment is begun, however, the better a prognosis. This has become a matter of great concern to certain militant gay groups, who fear a psychiatric plot to snatch up the young and eliminate their life-style.

3. Gender-Identity Disorder

4. Paraphilias

This group is characterized by persistent and repetitive, sexually-arousing fantasies or activities associated with non-human objects, by real or simulated suffering and humiliation, or by non-consenting partners.

The term paraphilia was chosen because, since it is rarely used, it is likely to be emotionally neutral.

AXIS II DISORDERS

A. Personality Disorders

A person's personality may predispose him to certain disorders. It certainly will affect their treatment and outcome.¹⁶ Unfortunately, the classification of personality remains an area of confusion. In part, this is because there is no clear discontinuity between traits and personality, or between various personality types.

While members of the *DSM-III* Task Force might have chosen to use a multi-dimensional, descriptive instrument such as the MMPI, they chose a typology. Typologies are artificial but do reduce information to patterns which are easily handled. Frequently, however, it will be necessary to utilize two or three different diagnoses from this grouping in order adequately to describe a patient.

In *DSM-III*, the personality disorders are classified as follows:

- (1) Paranoid
- (2) Schizoid
- (3) Schizotypal
- (4) Histrionic
- (5) Narcissistic
- (6) Antisocial
- (7) Borderline
- (8) Avoidant
- (9) Dependent
- (10) Compulsive
- (11) Passive-Aggressive
- (12) Atypical, Mixed or Other

Some of the most important changes in this section are:

1. *Separation of the schizoid and the avoidant personality*

Both of these groups are characterized by social isolation. The schizoid personality avoids social interaction, but does not want to mix. The avoidant personality, on the other hand, wants to mix but is afraid.

2. *Separation of the schizotypal and the borderline personality*

Schizotypal personalities may be the true "borderline schizophrenics." Indeed the criteria for their description were drawn from the Kety-Rosenthal studies of the relatives of schizophrenics. There is perhaps a 50% overlap with borderline personalities.

Unfortunately, this borderline group, which is characterized by impulsivity and instability in emotionality, impulse control, interpersonal relationships and identity, is no longer clearly borderline to anything¹⁷! The very term was one of the terms which the Task Force had difficulty accepting at all. However, clinicians engaged in outpatient psychotherapy insisted that it was a useful concept.

3. *Antisocial Personality*

Based on the most solid research in the area of personality,¹⁴ this grouping is also the most controversial. The diagnostic criteria seem to diagnose criminality, however, rather than antisocial personalities. In addition, those people who manifest an ability to learn, anticipatory anxiety, and loyalty (formerly, dysocial personalities) might well have been given official recognition somewhere in the classification.

4. *Separation of DSM-III criteria and psychoanalytic criteria*

The inclusion of the borderline personality and the narcissistic personality in the nosology is a response to current psychoanalytic interest in these areas. On the whole, however, psychoanalytic criteria have been difficult to

put into operational terms. Some authorities would suggest, for example, that the narcissistic personality can be diagnosed only through manifestations which occur in the transference.

B. *Traits*

Axis II may also be used to list personality traits that are prominent but not sufficient to warrant a diagnosis of a personality disorder. For example, for a person who does not meet all the diagnostic criteria for a compulsive personality, compulsive traits may be noted on Axis II in an individual with a major depressive disorder on Axis I.

C. *Specific Developmental Disorders (For Children)*

Specific developmental disorders are delays in specific areas of development and learning. *DSM-III* recognizes:

- a. Developmental reading disorder
- b. Developmental arithmetic disorder
- c. Developmental language disorder
- d. Developmental articulation disorder
- e. Mixed specific developmental disorder
- f. Atypical specific developmental disorder

It is important to note that these are included as "mental disorders," although the treatment is often educational. The official recognition of these disorders is surely one of the major contributions of this classification.

SUMMARY AND CONCLUSIONS

DSM-III is a revolutionary document. There are many more categories than there were in *DSM-II*. A multiaxial approach and operational diagnostic criteria with clear delineation of essential and associated symptoms are used for the first time in an official classification.

DSM-III will leave its mark on American psychiatry. It is a major advance, but it leaves much to be desired. Many of the new features were created as a reaction to criticism of *DSM-II* rather than as an expression of any basic unifying conception. Yet, its clear and relatively reliable diagnostic criteria can be expected to lead to more valid clinical research. The introduction of the multiaxial system should lead to a new emphasis on the relationships between mental and physical disorders, between personality and illness, and between premorbid personality, psychosocial stress and prognosis.

The classification is good for ruling out diagnoses; thus, it will be useful in research set-

tings. It is less helpful, however, for ruling in diagnoses. This may make it less valuable to the clinician who needs to treat people the best he can, whether or not the diagnosis is beyond reproach.

While psychodynamics is an area where it is difficult to find inter-tester reliability, this drawback does not mean that the framework is invalid, therapeutically unimportant, or not appropriately in the domain of the physician. Such an implication was certainly not the intention of the Task Force. In the hands of the less sophisticated, however, *DSM-III's* illusion of scientific purity may well lead to a very restricted and rather sterile therapeutic armamentarium, an armamentarium reduced largely to chemotherapy.

This classification bears the mark of having arisen in isolation. Input from a few centers involved in neo-Kraepelinian classification has been great, but there was remarkable neglect of other areas of importance, such as computer science and general systems, including the Balanced Service System, now a basic part of the Joint Commission on Accreditation of Hospitals' Accreditation Principles for Mental Health Services. The most serious consequences, however, are likely to arise from the fact that insurance companies were not actively involved. Whatever the scientists may imagine, it is very likely that what the practicing physician will diagnose will be influenced by what third parties will subsidize. If insurance companies do not accept the classification, clinicians may well declare, in the manner of Andrew Jackson, "The APA has made its decisions. Now let it enforce them!" In reality, however, third party payers are likely to embrace this nosology. It probably gives them reason not to pay for the treatment of a greater number of patients.

The members of Task Force did not address themselves to one of the major problems with any classification of mental disorders. Many physicians do not wish to stigmatize patients with a diagnosis which may cause them trouble in finding or retaining employment, or which may lead to their being discounted as "just a crazy" in some future emergency room visit. For these humanitarian reasons, the diagnoses of "anxiety neurosis with thought disorder" or "depressive neurosis" are not infrequently used to conceal rather than to clarify the patient's clinical condition.

The APA has forged nosological chains which may bind us very tightly. The Task Force did not intend the diagnostic criteria to be used like a cookbook, but they probably will be. The very reliability of the criteria may, in the minds of many, overshadow the fact that the syndromes may not be real.

The Task Force tried to select the best they could from current data, but they may have crystallized prematurely a new orthodoxy, an orthodoxy built on much more than scientific fact. This drawback can be remedied by future studies, but many may mistakenly assume that all decisions were based on facts of equal scientific importance. Task Force members know that personality, political power-plays, and expedient compromise sometimes carried the day. The seriousness of this deficit becomes more apparent when we consider the probable use of this document by review groups, malpractice lawyers and third-party payers, and the fact that the APA itself intends to publish a companion volume on treatment planning. It behooves us to recall that its medieval forerunner, the *Malleus Maleficarum* was widely tested, acclaimed, and used for centuries in the detection, classification and disposal of witches.¹⁹

This classification is said to be non-theoretical, so that our sight may be freed from the blinders of past. This is not true. It is not possible not to have an epistemology, a framework for observing and for describing. The framework of *DSM-III* is actually atomistic, anti-contextual and reductionistic. It presupposes disease entities in individuals. Some may herald this as a proof of psychiatry's "return to medicine," but this is a truncated model of medicine which internists such as Engle²⁰ see as no longer appropriate even for internal medicine. In all fairness, however, this was not the intention of the Task Force. It did not attempt to classify the pathology of systems — dyadic, triadic, or family — because none have yet been devised which are acceptable to more than their creator.

It would be a pity if the achievement of inter-tester reliability were to lull us into neglect of the next step: validation of the categories. Our maps of psychopathology today are similar to the maps of the world conceived by ancient cosmologists. They served well enough for initial explorations, but were soon in need of correction as travelers ventured beyond the Pillars of Hercules. Unfortunately, in their need to begin afresh, the Task Force has de-

cided to ignore much of value in the journeys of their predecessors.

The Task Force thought it useful to include within *DSM-III* a statement that mental disorders were medical disorders. This was done, in part, to help clarify the relationship of psychiatry to the rest of medicine and partly to answer the Szaszian criticism that mental disorders are myth. Certain psychologists have seen in this an attempt to enlarge the domain of psychiatry and correspondingly to diminish the domain of other mental health professions.²¹ The professional domain of psychiatry, they claim, is now defined as the treatment of organismic dysfunction and organismic dysfunctions are defined to fit the existing expertise of psychiatry. Under attack from the American Psychological Association, the Task Force retreated, declaring that it was not their mandate to clarify the relationship of psychiatry to medicine.

If the beginning of wisdom is the acknowledgement of ignorance, this classification is a major advance. It makes it possible for people who use the same psychiatric term to mean the same thing. It puts old observations and assumptions in a new light. It generates new questions for research. Above all, it leaves the vast darkness of the subject unobscured. □

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Washed Sputum Gram Stain and Culture in Pneumonia:

A Practical Tool for the Clinician

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MARIOS E. SHAGOURY, MD³

Washing sputum gets rid of the gross contamination by the oral flora and improves the diagnostic yield of the sputum Gram stain and culture.

INTRODUCTION

Together with influenza, pneumonia is the fifth leading cause of death in the United States and is responsible for ten percent of all hospital admissions.¹ The low diagnostic yield from sputum Gram stain and culture as routinely performed is a recognized clinical problem.² In an attempt to improve the yield, several methods have been developed. These "alternative" methods include quantitative cultures,¹ pneumococcal antigen detection by counter-immunoelectrophoresis,³ microscopically selected specimens with "guided" cultures,^{4,5} transtracheal, bronchoscopic, or lung aspirations,^{6,7} and sputum washing.⁸ Al-

though these alternate methods do improve the specificity and sensitivity of the sputum culture and Gram stain, they have not been widely adopted for routine use. The quantitative culture and pneumococcal antigen detection are cumbersome. The transtracheal, bronchoscopic, and lung aspirations are invasive. The microscopically selected specimens with guided cultures do not eliminate oropharyngeal contamination. The sputum washing methods have required unusual equipment such as tea strainers, etc., and have not emphasized dispersion of the sputum bolus into small components.

We describe a method of sputum washing that we have been routinely using since 1977. It requires tap water, a sputum cup, a wooden applicator, and that the physician obtain sputum during the physical examination. It involves active manual dispersion of the sputum bolus in water and the selection of certain sinking components for Gram stain and culture. Utilizing this method, we have evaluated 25 consecutive patients with pneumonia. In more than 90% of the patients the washed sputum Gram stain was the most important diagnostic tool leading to the selection of appropriate antibiotic therapy.

MATERIALS AND METHODS

1. *Patient selection:* Excluding patients with cancer undergoing chemotherapy, all other pa-

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tients referred to us with fever, productive cough, and evidence of pneumonia by x-ray were included in the study. Between August, 1977, and September, 1979, a total of 25 patients were examined.

2. *Obtaining the specimen:* During the physical examination, a deeply-coughed sputum specimen was collected often with the aid of vigorous chest cupping. Utilizing this maneuver several patients, who otherwise were unable to produce sputum, did provide a satisfactory specimen. Loud tracheal rhonchi always preceded the expectoration of sputum. When the cough was dry (tracheal ronchi inaudible) the expectorated specimen was considered supralaryngeal in origin and was discarded.

3. *Washing the sputum:* Utilizing a modification of an older technique,⁹ the sputum cup is filled with tap water, the bolus of sputum is vigorously agitated with a sterile wooden applicator until the specimen disperses into smaller fragments. With the wooden applicator, the sputum fragments are pushed to one side of the cup and the water is decanted from the opposite side. This process is repeated until the water becomes clear and the sputum fragments appear free of contaminating saliva and debris.

4. *Specimen selection:* At the end of the washing process the thick yellow sputum fragments usually sink to the bottom of the cup while the whitish fluffy components float to the top. The floating components are usually contaminated with oral secretions and are less desirable. The fragments that sink are usually spiral or cylindrical resembling small airway casts, and when present, carry the highest diagnostic yield. With a sterile wire loop the densest sinking fragment is selected. If no sinking fragments are found then the densest floating fragment is chosen instead.

5. *The washed sputum Gram stain:* With the wire loop the selected specimen is divided into two parts on a five percent sheep blood agar plate. One part is placed on a microscope slide, crushed and smeared evenly by rolling it repeatedly with a wooden applicator. It is then gently dried over an open flame, stained with the Gram stain method, and inspected under low power (100x) and oil immersion (1000x) magnifications. A sputum specimen was considered satisfactory if it contained numerous white blood cells (WBC) in most oil fields and no squamous epithelial cells (SEC) in most

low power fields. If a specimen did not satisfy these two criteria, it was rejected and the remaining sputum fragments were examined or further attempts to obtain sputum were made. However, when a satisfactory specimen could not be obtained, the best available sample was processed. Specimens were graded on a scale of three based on SEC and WBC content:

a) WBC per oil field	b) SEC per low power field
none - rare = 0	none - rare = 0
1 - 10 = +1	1 - 5 = +1
11 - 20 = +2	6 - 10 = +2
>20 = +3	>10 = +3

6. *The washed sputum culture:* The part of the sputum specimen left on the blood agar plate is vigorously teased with a sterile wire loop and smeared evenly over the entire plate. Then utilizing the same wire loop, the remaining sputum fragments are recollected from the blood plate and in the same manner, smeared onto a chocolate agar plate and into a thio-glycolate broth tube. The incubation and identification of bacteria were handled in a routine fashion by our hospital laboratory. *Streptococcus pneumoniae* was identified by optochin disc sensitivity (>18 mm zone) while most other pathogens were sent to the State Health Department Laboratory for identification.

7. *Prior antibiotic therapy:* Patients who had been treated with antibiotics in the three days before presentation were noted but were not excluded from the study.

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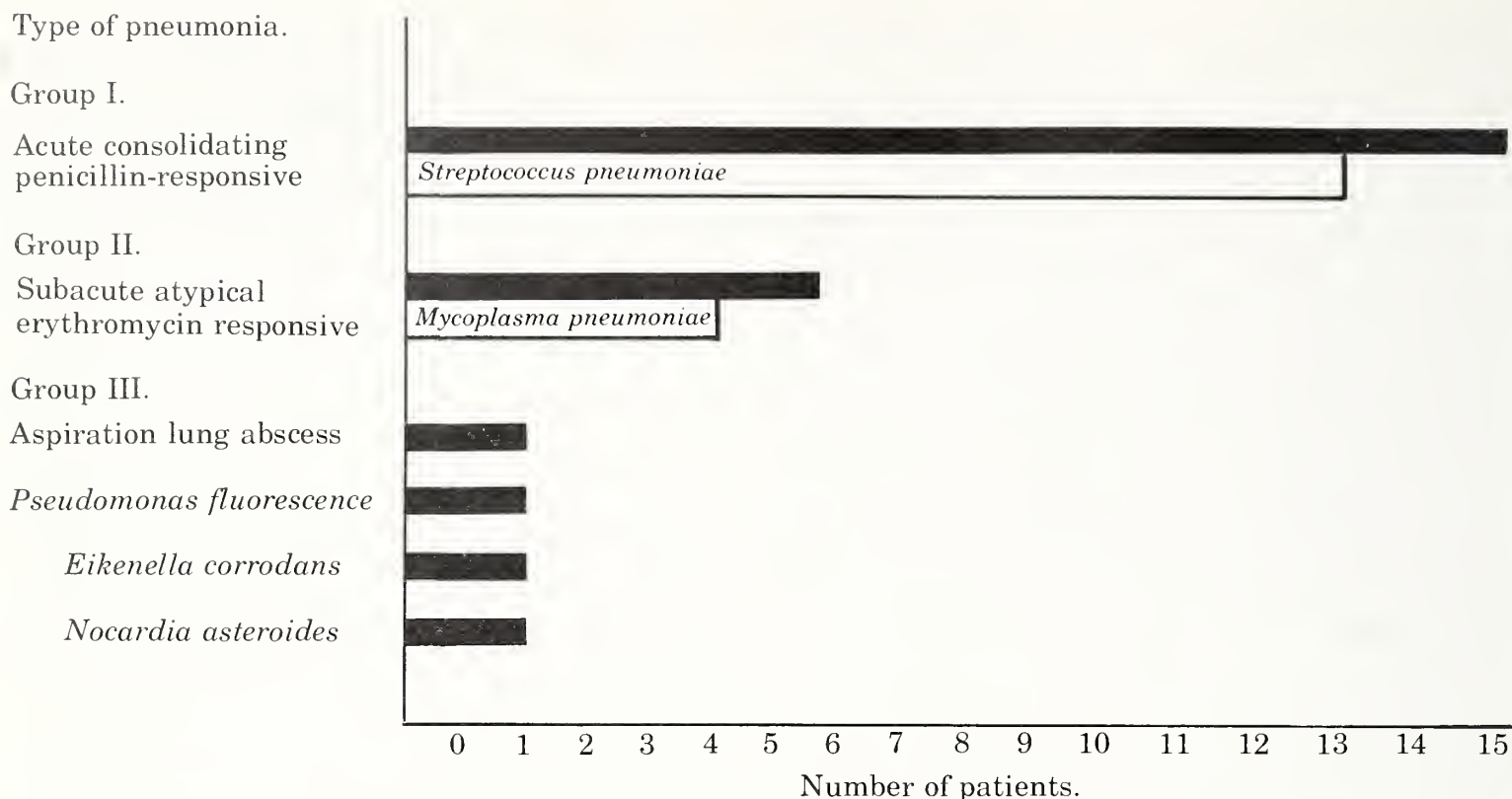


Figure 1. Clinical and etiologic classification of pneumonia.

8. Etiologic diagnosis of pneumonia:

Pneumococcal pneumonia was diagnosed if: a) the sputum Gram stain showed a predominance of polymorphonuclear leukocytes with typical spindle shaped gram positive diplococci as the sole or predominant organism, or if the sputum culture grew purely or predominantly *Streptococcus pneumoniae*; b) the pneumonia was acute consolidating and; c) the patient responded promptly to penicillin.

Mycoplasma pneumoniae was diagnosed if: a) the onset was subacute; b) there was dissociation between the physical findings and chest x-ray findings compatible with atypical pneumonia and; c) there was a four-fold rise in complement-fixing antibody titer against *Mycoplasma pneumoniae*.

Other bacterial etiologies were diagnosed

when: a) the sputum Gram stain revealed a predominance of polymorphonuclear leukocytes and a single morphologic type of bacteria; b) the sputum culture grew a pure or predominant bacterium morphologically compatible with that seen on the sputum Gram stain and; c) the patient responded to the appropriate antibiotic to which the cultured organism is found sensitive.

9. *Classification*: Patients were divided into three clinical groups as depicted in Figure 1. Group one: acute consolidating penicillin-responsive pneumonia (15 patients). Group two: subacute atypical erythromycin-responsive pneumonia (6 patients). Group three: heterogeneous pneumonia (4 patients).

10. *Blood cultures*: All hospitalized patients (19 of 25) had two blood cultures drawn before antibiotic therapy was instituted.

11. *Treatment*: The choice of initial antibiotic therapy was based primarily on the results of the sputum Gram stain.

RESULTS

Of the 25 patients there were 13 females and 12 males. They ranged in age from 18 to 93 years as shown in Figure 2. Blood cultures were negative in all patients.

Group one: Fifteen patients had an acute consolidating pneumonia (Table I). All responded to penicillin and promptly cleared their infiltrates. Thirteen of the fifteen (87%) had the typical pneumococcal pneumonia

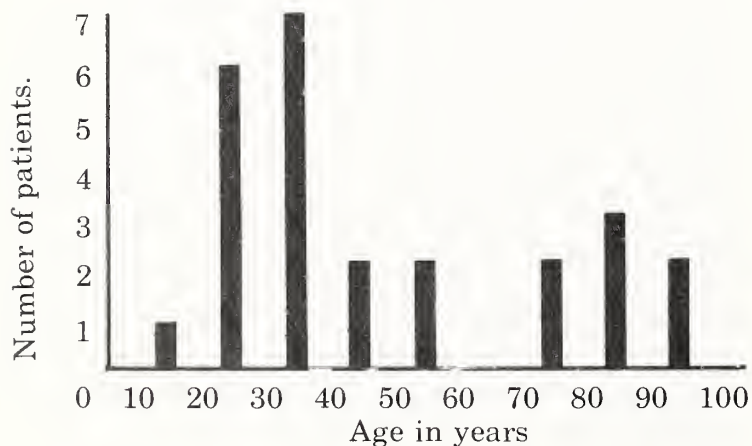


Figure 2. Age distribution of 25 patients with pneumonia.

Number of Patients	Sputum WBC/SEC	Sputum Gram Stain	Sputum Culture	Prior Anti-biotic Therapy
10(66%)	+3/0	Typical Pneumococcal	Predominant Streptococcus Pneumoniae	0
2(13%)	+3/0	Typical Pneumococcal	Normal Flora	Penicillin Erythromycin
1	+3/0	Typical Pneumococcal	Normal *	0
1	+3/0	Chains of Gram Positive Cocci?	Staphylococcus aureus	0
1	+1/+2	Oral Flora	Normal Flora	0

TABLE 1. Sputum Gram Stain and Culture in 15 Patients with Acute Consolidating Penicillin-Responsive Pneumonia (Group I).
*Unwashed culture.

Patient Age/Sex	Sputum WBC/SEC	Sputum Gram Stain	Sputum Culture	Prior Antibiotic Therapy	Mycoplasma *C.F Titer: Acute and Convalescent
S.M. 32-F	+1/+2	Oral Flora	Normal Flora	Gentamycin plus Keflin	A = 1/1024 C = 1/4096
V.C. 40-M	+1/0	No Organisms	Normal Flora	0	A = 1/16 C = 1/16
L.A. 28-F	+1/0	No Organisms	Predominantly Normal Flora <i>Streptococcus Pneumoniae</i> (10%)	0	Not Done
M.I. 36-M	+1/+2	Oral Flora	Normal Flora	Penicillin	A = 1/64 C = 1/1024
H.D. 32-M	+1/+2	Oral Flora	Normal Flora	Erythromycin Keflin Gentamycin	A = 1/8 C = 1/32
S.G. 18-M	+1/+2	Oral Flora	Normal Flora	0	A = 1/8 C = 1/1024

TABLE 2. Sputum Gram Stain, Culture, and Mycoplasma* Compliment Fixation Titers in 6 Patients with Subacute Atypical Erythromycin-Responsive Pneumonia (Group II).

Gram stain with numerous WBC, no SEC, and gram positive spindle-shaped diplococci as the sole or predominant organisms. Of these thirteen patients, ten (77%) grew *Streptococcus pneumoniae* as the sole or predominant organism on sputum culture and three failed to grow pneumococcus (two were taking antibiotics and the third inadvertently had an unwashed sputum culture). In the two patients who did not have the typical pneumococcal findings on Gram stain, one produced inadequate specimens while the second produced sputum containing chains of Gram positive cocci and grew penicillin-resistant *Staphylococcus aureus* on culture. Nevertheless, both patients did respond to penicillin.

Group two: Six patients had an atypical pneumonia (Table 2). Their disease had a subacute onset, the physical findings did not predict a pneumonia, but the chest x-ray showed an infiltrate. They were all treated with erythromycin and responded promptly, clearing their infiltrates completely. In this group of patients the sputum samples were generally unsatisfactory in spite of concerted efforts at obtaining good specimens. All six had less than ten WBC per oil immersion field, four samples were heavily contaminated with SEC and oral flora, and all grew normal flora on culture. Four had a four-fold rise in titer of complement-fixing antibodies against *Mycoplasma pneumoniae*. Of the remaining two a convalescent serum could not be obtained

in one, and in the second, there was no rise in titer.

Group three: The remaining four patients were nongroupable and are listed in Table 3. They all were able to produce adequate specimens, and the Gram stain results were in total agreement with the culture. Antibiotic therapy was initiated based on the results of the sputum Gram stain. In three of the four patients the correct antibiotic was chosen. In the fourth patient *Pseudomonas fluorescence* was cultured and found resistant to doxycycline and indeed the patient failed to respond to that antibiotic. When treatment with amoxicillin was initiated the patient responded favorably and the lung infiltrate cleared.

DISCUSSION

In our hands the entire process of sputum processing from collection to culture took an average of ten minutes. Tap water does not alter the bacterial flora of the sputum.⁸ We found that with proper stimulation most patients were able to provide a deeply-coughed specimen. Moreover, it became obvious, just by listening and watching the patient cough, that the specimen came either from above or below the larynx. By rejecting specimens that were obviously collected from above the larynx, an important source of error was eliminated; Since WBCs that originate in the sinuses, nose, or throat may render the Gram stain findings confusing.

Patients in the atypical pneumonia group had difficulty producing a deeply-coughed

Patient Age/Sex	Sputum WBC/SEC	Sputum Gram Stain	Sputum Culture	Prior Antibiotic Therapy	Comments
S.C. 35-F	+2/0	Lung Abscess Flora	Normal Flora	0	Acute postoperative aspiration Pneumonia with lung abscess.
W.G. 84-F	+3/0	Small Gram Negative Rods	<i>Pseudomonas fluorescence</i> Pure Culture	0	Subacute bilateral infiltrate. Failed on doxycycline. Cured with amoxicillin.
B.G. 82-F	+3/0	Nocardia-Like Chains	<i>Nocardia asteroides</i> Pure Culture	0	Chronic bilateral infiltrates. Cured with amoxicillin plus trimethoprim-sulfamethoxazole.
M.B. 34-F	+3/0	Small Gram Negative Rods	<i>Eikenella corrodans</i> Pure Culture	0	Subacute left basal infiltrate. Cured with doxycycline.

TABLE 3: Heterogeneous Pneumonia (Group III).

specimen; the sputum which contained only a few WBC was usually heavily contaminated with SEC and oral flora in spite of washing; and no predominant organism was recognized by Gram stain or culture. When this triad prevailed, erythromycin was used as the initial antibiotic.

In the heterogeneous and penicillin-responsive groups, both Gram stain and culture were valuable. The patients produced sputum without much difficulty. After the washing oral contamination was microscopically eliminated and the pathogens grew either in pure culture or as the predominant organism. Prior antibiotic therapy did not affect the results of the Gram stain but invariably prevented the growth of the pneumococcus on culture.

In 23 (92%) of the patients the sputum Gram stain result was the most important criterion on the basis of which appropriate antibiotic therapy was initiated. The sputum culture confirmed the Gram stain findings in 21 (84%) of 25 patients.

Based on this study we conclude the following:

1. In contrast to prevalent pessimism regarding sputum examination the diagnosis and therapy of pneumonia should be based on the results of the washed-sputum Gram stain, the clinical picture, and washed-sputum culture in that order of importance.

2. Appropriate specimen collection, as part of the physical examination, insisting on a deeply-coughed infralaryngeal sample is of vital importance. This helps eliminate serious errors since WBC that originate above the larynx may render the Gram stain findings confusing.

3. Sputum-washing is a simple procedure, occasionally time consuming and should be performed by the physician because the nature of the specimen and the results of the Gram stain dictate the initial antibiotic choice in the majority of patients.

4. In patients already treated with antibiotics and in patients with atypical pneumonia the washed-sputum Gram stain is helpful while the washed-sputum culture is not.

5. Blood cultures should be obtained but the results are usually negative. This is probably because patients are either seen early in their illness or are already taking antibiotics. Although when positive blood cultures are diagnostic, they are not sensitive and rarely help the clinician.

6. Except in certain complicated situations, sputum-washing obviates the need to do invasive procedures such as transtracheal, trans-thoracic, or bronchoscopic aspirations in order to diagnose pathogen-specific pneumonia.

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Seminar On Antibiotics IV

The Cephalosporins

EVERETT R. RHOADES, MD

Despite much criticism mostly relating to cost, cephalosporins are important adjuncts to antimicrobial therapy, especially in the penicillin allergic patient. Newer modifications are truly broad spectrum.

Many individuals believe that this group of antibiotics is more inappropriately used than any other antibiotics and that they do not clearly possess superiority over other antibiotics. In spite of this, cephalosporins enjoy widespread popularity. In the past few years, several modifications of the cephalosporin molecule have been achieved that have increased the usefulness of these antibiotics. There are now a considerable number of cephalosporins from which the physician may choose. (Table 1)

The basic structure of cephalosporins is 7-amino cephalosporanic acid which bears an obvious resemblance to 6-amino penicillanic acid. Indeed, until recently, there have been more similarities than differences between penicillins and cephalosporins.

Cephalosporanic acid has three significant features: One, sites at which side-chains may be substituted; two, the presence of the beta-lactam ring, a point at which enzymes (beta-lactamases) may destroy the configuration of the molecule and three, a relative lack of toxicity, a characteristic which may have had the

Table 1
CEPHALOSPORIN PREPARATIONS

Drug	Trade Name	Route of Administration
Cephalothin	Keflin	I.V. (painful on I.M.)
Cephaloridine	Loridine	I.V., I.M.
Cefazolin	Ancef	I.V., I.M.
	Kefzol	
Cephapirin	Cefadyl	I.V., I.M.
Cephradine	Velosef	I.V., I.M., P.O.
	Anspor	
Cephaloglycine	Kafocin	P.O.
Cephalexin	Keflex	P.O.
Cefamandole	Mandole	I.V., I.M.
Cefoxitin	Mefoxin	I.V., I.M.
Cefaclor	Ceclor	P.O.
Cefadroxil	Duricef	P.O.

unfortunate side effect of increasing indiscriminate use.

PHARMACOLOGY

The major points of pharmacology of the cephalosporins are shown in Table 2. Cephalosporins provide rapid peaks of serum activity after intravenous administration and most are cleared rapidly from the serum. The slow excretion of cefazolin provides higher blood levels and permits less frequent dosage. Cephapirin appears to be interchangeable with cephalothin in all important respects. Cephalothin is to a large degree desacetylated and excreted by the liver and thus requires less reduction of dose in renal failure. The dose of the other cephalosporins should be decreased when the serum creatinine exceeds 1.5 mg %. Cephaloridine, which should not be used because of its nephrotoxicity, is not listed. Cephaloglycin, an oral preparation, has ex-

Table 2
SOME PHARMACODYNAMIC PROPERTIES OF CEPHALOSPORINS

	Peak level			Serum half-life I.V. (hr.)	Detectable level after I.M. (hr.)	Effect of food
	1 gm I.M. food (mcg/ml)	1 gm I.V. (mcg/ml)	500 mgm p.o. (mcg/ml)			
Cephalothin	20	64		0.4	5-6	
Cefazolin	60	150		1.8	12	
Cefradine	15	80	15			
Cephapirin	15	60		0.4	4	
Cefamandole	20	88		.5	6-8	
Cefoxitin	22	100		.6	4 or >	
Cephalexin			18	0.6		Minor
Cefadroxil			15	1.2		Minor
Cefaclor			12	0.6		Major

tremely limited usefulness — perhaps in some urinary tract infections. Cephadrine is widely advertised as the only preparation available for oral, intramuscular, or intravenous use but has no other advantage. Cefadroxil is slowly excreted, permitting once or twice daily administration. The cephalosporins do not diffuse consistently into the cerebrospinal fluid and should not be used to treat meningitis.

The major side effects of cephalosporins are shown in Table 3. Most experience of course has been with cephalothin. These drugs at present appear to be much less toxic than most of the other antimicrobials.

CLINICAL USES

A summary of the indications and contraindications for cephalosporins is shown in Table 4. The older cephalosporins, offering relatively little more benefits than penicillins had their major use in the therapy of gram-positive organisms. With the advent of cefamandole and cefoxitin, the spectrum of activity has been extended to include indol-positive *Proteus*, *Klebsiella*, *Enterobacter*, *E. coli*, and *Hemophilus influenzae*. It is likely that the indications for these drugs may change in the next few years as more experience is gained.

Even though cephalosporins are potent anti-staphylococcal drugs, their effectiveness in endocarditis, when used alone, has been disappointing. Likewise, they should not be used to treat meningitis. There is never a need to combine cephalosporins with penicillins. In addition, they are especially inactive against *Enterococcus*.

Cephalexin and cephradine are well ab-

Table 3
CEPHALOSPORINS
UNTOWARD REACTIONS

- Allergy:
 - Immediate hypersensitivity shared very slightly with penicillins. Most times cephalosporins may be safely administered to penicillin-allergic patients. Hence, their usefulness is increased in penicillin-allergic patients.
 - Prolonged high doses have been associated with serum sickness-like syndrome
- Anemia: A Coombs-positive hemolytic anemia. Dose related, seen in renal failure and hypoalbuminemia.
- Renal: Slight.
- Local:
 - Cephalothin and cefoxitin cause pain when given I.M.
 - Phlebitis not uncommon.
- Gastrointestinal disturbance: Diarrhea with oral forms, especially at higher doses.

Table 4
CEPHALOSPORINS

Indications	Contraindications
Staphylococcal infections (except CNS or Endocarditis)	Enterococcal infections
Klebsiella and other aerobic Gram neg infections	CNS infections
Hospital-acquired infections	Endocarditis (if used alone)
Initial therapy of suspected bacteremia	
Prophylaxis in certain orthopedic and cardiovascular surgical procedures	

sorbed after oral administration, providing peak blood levels up to about 30 mcg/cc after 1 gm is taken by mouth. Thus, they are useful drugs for the ambulatory treatment of mild infections such as staphylococcal infections of skin or respiratory tract. Cefadroxil has the added benefit of requiring no more than once or twice daily administration. Cefaclor has the added advantage of being effective against *Hemophilus influenzae* so that it is a popular preparation for the treatment of respiratory infections and otitis.

RECENT DEVELOPMENTS IN CEPHALOSPORINS

In late 1978 and early 1979 two new cephalosporin-like compounds (one is designated a cephamycin) became available. Previously, in spite of very extensive use, many investigators believed there were no primary indications for the use of cephalosporins. This point was always debatable and many physicians regularly used cephalosporins in the initial therapy of septicemia of unknown cause even when maintaining that there was no clear indication for their use. However, the development of cefoxitin and cefamandole represents an advance in the development of cephalosporins. They have possibly the broadest-spectrum that has yet been developed for any antibiotics, possessing activity against penicillin-susceptible organisms and many gram-negative bacilli. These two compounds in some instances may take the place of combinations of penicillins or cephalothin and an aminoglycoside.

Differences between various cephalosporins are summarized in Table 5. The activity against *Hemophilus influenzae* is the most prominent attribute of cefamandole. It is not

Table 5

DIFFERENCES BETWEEN CEPHALOSPORINS

<i>S. aureus</i>	—cefamandole, cephalothin, cefazolin most active
<i>Listeria</i>	—resistant to cefoxitin
<i>H. inf.</i>	—cefamandole and cefaclor most effective
<i>E. coli</i>	—cefamandole & cefoxitin most effective
<i>Klebsiella</i>	—cefamandole & cefoxitin most effective
<i>Enterobacter</i>	—cefamandole & cefoxitin most effective
<i>Proteus</i> , Indole-pos.	—cefamandole & cefoxitin most effective
<i>Serratia</i>	—cefoxitin only one likely to be effective (about 50%)
<i>B. fragilis</i>	—cefoxitin only one highly effective

an unreasonable choice in the initial treatment of pneumonia. Cefoxitin has earned a place in the therapy of surgical infections, especially in intra-abdominal sepsis where in many instances it may permit the physician to avoid giving an aminoglycoside.

SUMMARY

Contrary to opinions of others, this author believes that cephalosporins are useful drugs in a variety of circumstances, their major present drawback being increased expense when compared to penicillins. They possess a very low incidence of side effects, may be given by various routes of administration, and possess wide spectra of activity. More recently-developed cephalosporins, and several under clinical investigation, offer advantages of spectrum over earlier preparations. Many infections presently treated with combination aminoglycoside therapy could be managed with cefamandole or cefoxitin alone. □

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News From The Oklahoma State Department of Health

The health hazards of breathing polluted air are well documented. Prolonged exposure to air pollution increases the morbidity and mortality rate associated with certain respiratory diseases. The Air Quality Service of the Oklahoma State Department of Health is charged with the responsibility of monitoring pollutant levels in the ambient air, keeping emission inventories from all major sources, reviewing applications for permits to construct or operate facilities, investigating complaints and achieving overall compliance with current air pollution control standards.

In 1979 the Air Quality Service collected and analyzed more than 91,000 samples in an effort to determine the quality of Oklahoma's air. Ambient air parameters monitored included suspended particulates, sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone and lead. The results indicated that there were several excursions above the national particu-

late and ozone standards in Oklahoma and Tulsa Counties, causing them to be designated as non-attainment areas. As a result of this designation during the same period the Oklahoma State Department of Health inspected 259 sources of emissions to air and issued 145 construction/operating permits for industry. Special studies were conducted in an effort to update the various pollutant reduction strategies in these two counties.

All of these activities are included in the Oklahoma Air Quality Implementation Plan and its periodic revisions. The health department works closely with the United States Environmental Protection Agency to maintain the superior air quality we all enjoy while doing its best to accomodate the state's industrial and economic growth. By maintaining continued monitoring and effective control programs, it is the Oklahoma State Department of Health's hope that Oklahoma's air will continue to be among the best in the country. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JULY, 1980

DISEASE	JULY 1980	JULY 1979	JUNE 1980	Total To Date	
				1980	1979
Amebiasis	6	2	4	26	10
Aseptic Meningitis	9	11	6	32	30
Brucellosis	—	1	—	2	2
Encephalitis, Infectious	2	2	1	6	13
Gonorrhea (Use Form ODH-228)	1143	1164	1051	6627	6175
Hepatitis A	38	18	25	242	132
Hepatitis B	21	18	15	114	58
Hepatitis Unspecified	15	24	25	159	99
Measles (Rubeola)	10	—	48	769	22
Meningococcal Infections	—	1	3	16	25
Pertussis	4	5	2	15	8
Rabies (animal)	13	23	23	168	174
Rocky Mountain Spotted Fever	18	9	8	39	38
Rubella	1	—	1	4	22
Rubella (congenital)	—	—	—	—	—
Salmonellosis	39	41	24	141	160
Shigellosis	31	15	16	119	104
Syphilis (Use Form ODH-228)	13	9	11	55	45
Tetanus	—	—	—	—	—
Tuberculosis	18	31	46	186	210
Tularemia	10	—	4	15	5
Typhoid Fever	—	—	—	1	—

HMO Report Received By Board

A detailed report on the formation of the Prudential Health Insurance Company's HMO in the State of Oklahoma was given to the OSMA's Board of Trustees when it met on August 16. Michael Haugh, MD, a member of the association's committee on Alternative Health Care Delivery Systems, presented the status report.

The report was based on a detailed study of an application for licensure to operate an HMO filed by the Prudential Health Care Plan of Oklahoma, Inc. In addition, clarifying information came from direct contact with R. LeRoy Carpenter, MD, the organization's medical director.

The report was received by the Board of Trustees for information only.

A Certificate of Incorporation was issued to the Prudential Health Care Plan of Oklahoma, Inc. on April 18 as a for-profit business corporation under the laws of the State of Oklahoma. The corporation itself is wholly owned by PRUCARE, Inc., a holding company owned by the Prudential Insurance Company of America. PRUCARE elects all members of the Health Care Plan's Board of Directors.

Oklahoma City employees of the budding HMO refer to it as "PRUCARE," even though that is the acronym for the holding company that owns the HMO.

The actual HMO is divided into three main parts. PRUCARE is responsible for marketing and sales of the HMO concept. It is entered into a separate contract with Prudential to furnish administrative services. The third portion of the organization is the "medical group" which is a separate corporation made up of physicians licensed to practice medicine in Oklahoma that has contracted to furnish medical services to PRUCARE members and subscribers.

The medical group was incorporated in Oklahoma in July and will provide primary care physician services and less sophisticated routine laboratory and x-ray services, for subscribers. Hospital services, specialized physi-

cian, laboratory and x-ray services from providers other than the medical group will be provided by referral or authorization by the medical group.

According to R. LeRoy Carpenter, MD, medical director for PRUCARE, the medical group will develop relationships with existing hospitals, medical specialists and other providers in the community as sources for referral services.

In order to assure the success of Prudential's HMO the Board of Directors of Prudential's Insurance Company adopted a resolution authorizing the expenditure of \$5.5 million to cover development costs and initial operating deficits. The licensure application stated, "Operating losses are anticipated for the first several years of the HMO due to high fixed costs associated with the provision of services and administration of the program."

Current projections indicate a break-even budget in 1986, the first projected year in which revenues for the HMO will exceed expenses. An initial year's enrollment of 3,900 members is anticipated, with membership by the end of the year 1986 to be in excess of 36,000.

Membership recruitment will be concentrated in those firms in the Oklahoma City area employing 25 or more persons. Nearly 1,300 such firms have been targeted for contact.

Prudential expects that the member to subscriber ratio will be 2.3 persons. This means for every 1,000 members Prudential will be providing coverage for 2,300 persons.

Initial premium for the HMO services will be \$31/mo for single persons and \$98/mo for families. There is a projected average rate increase of 11½% per year built into the plan.

Prudential has contracted for outpatient space in a building to be located in the area of Baptist Medical Center. Initial hours of operation are projected to be 8:00 AM to 5:00 PM, Monday through Friday, with two evening sessions per week, going to 9:00 PM. The licensure application states "at all times members can reach the physician on call by dialing the clinic's number. Access to medical care is available 24 hours a day."

At the present time it is anticipated that Prudential's HMO physicians will begin seeing patients on April 1, 1981. According to Doctor Carpenter, initial plans for the medical group call for the employment of five primary care physicians to staff the clinic when it begins op-

eration on that date. Additional physicians will be recruited as needed.

The schedule of benefits submitted with the licensure application indicates that Prudential Health Care Plan of Oklahoma intends to offer a full range of physician, outpatient and inpatient services. While most of the services will be paid in full, there is a co-payment requirement of 50% of the charge of the services on outpatient mental health services.

The schedule of benefits may be expanded in the future to include programs for prescription drugs and dental care. While the dental plan might or might not include co-payment, the prescription drug plan would require the member to pay a flat rate for each prescription and there would be an additional premium added to the base rate. Provisions for these two additions, however, was not included in the original application for licensure. □

Communication is Key To Improved Jail Conditions

Adequate communication is the key to health care improvement for prisoners said a representative of the American Medical Association during his recent visit to Oklahoma.

AMA organized the Health Care Jail Project (HCJP) in 1975 after conducting a survey which indicated serious medical needs of prisoners in jails across the nation. During a recent visit to the Oklahoma State Medical Association (OSMA) headquarters Joe Rowan, director of the AMA Health Care Jail Project said attitude changes via adequate communication have resulted in the greatest health care improvements in jails.

Rowan says the major role of state medical societies is communication with other health agencies and jail personnel in coordinating improvements for medical services.

The Oklahoma State Medical Association became involved in the project nearly two years ago. Last year it selected ten of the state's jails to participate in the project. OSMA has divided Oklahoma's project jails among several members of the staff. These staff members have been working with their designated jails in trying to develop better communication and to identify the specific needs of each jail. Rowan commented on how Oklahoma's use of several OSMA staff members should become a

model to other state medical societies participating in the jail project.

Last summer OSMA further opened communication with jail personnel by participating in a seminar conducted with the Oklahoma Law Enforcement Training Center. OSMA staff instructed jail personnel about prison health care delivery in the area of screening and evaluation of medical care services to inmates and record keeping. Lyle Kelsey, OSMA jail project coordinator said the seminar opened the door for helping to solve problems because of the exchange in communication between the seminar sponsors and participants.

Rowan blames inadequate communication for the greatest medical need among jails throughout the nation — the need for a medical supervisor. He says the attitude that prisoners are dangerous is prevailing in our society and it's keeping medical professionals from becoming involved in health care delivery for prisoners. The jail project director says jails which have been accredited by AMA for meeting specific health care standards are disproving this attitude. He says these institutions are proving that if prisoners are treated like human beings, they will respond like human beings.

"Inadequate information breeds fear. It's actually safer to work in a jail than in a community," he said.

Rowan said provisions for adequate medical care coincide with a reduction in the inmates' tendency to "test" the system.

"They are responsive to reasonable care and seem to relax in knowing their physical needs will be provided for," Rowan said.

The jail project coordinator pointed out that proper health care delivery within the prison system is not only advantageous to the inmates but also to taxpayers—tax-dollar needs are reduced when regular medical services are available in prisons. Early diagnoses of illnesses result in treatment to prevent the condition from evolving into more serious stages requiring more expensive medical attention. Costly usage of hospital emergency rooms can also be avoided.

The Law Enforcement Assistance Administration (LEAA) has provided matching funds for jails participating in the health care project. Rowan said the LEAA credits AMA for having one of the best programs among those for which it provides funds because the jail project has produced effective results. □

Cost Containment Digest Cites Oklahoma Hospitals

The effective cost containment measures of three Oklahoma hospitals have been selected for publication in the latest edition of the *Digest of Hospital Cost Containment Projects*.

The digest offers a compilation of programs and projects which have been implemented in hospitals throughout the nation to reduce the rising costs of health care expenditures. The publication's examples of programs and projects were selected from letters by various hospitals in response to the American Hospital Association's request for information on cost containment measures.

Hillcrest Medical Center, Tulsa, is cited in the digest twice. It is first listed for its engineering-shared services under the digest's category of management engineering. The project involves a comparison between the volume of work in man-hours to each budgeted service.

Productivity goals were also established for each area. The hospital also was cited for its membership in a shared service/purchasing organization. Hillcrest has estimated that it saved \$30,000 to \$40,000 in 1979 as a result. Sixty-one hospitals belong to the group resulting in savings of more than \$1.9 million in total annual purchases.

Payne County's Masonic Hospital Association is listed for its effort to conserve energy. The hospital hired a contractor to check for malfunctioning in its heating, cooling and water system equipment. Changes were made to decrease power requirements.

Also cited in the digest is the Midwest City Memorial Hospital. It was selected for its successful effort in the savings of health care costs via materials management. In one month the hospital reduced its linen use by \$1,754.

The digest included many other cost containment measures listed under various categories including data management, employee incentives, financial management, insurance programs, internal resources, medical staff, patient services and others. □

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Annual Meeting Program Plans Near Completion

It was reported to the Board of Trustees that the scientific program for the 1981 OSMA Annual Meeting, under the direction of Hal Vorse, MD, has been virtually completed. The title for the scientific program will be "The Clinical Crisis" and will include two plenary sessions, the first on Friday, May 8, 8:45 AM-1:45 PM, the second on Saturday, May 9, 8:45 AM-11:25 AM. It is planned that there will be eleven half-hour didactic lectures divided between the two days. The individual subtitles will be Drug Reactions, Allergic Reactions, Clinical Crisis in the Cancer Patient, Emergency Medical Systems of the Future in Oklahoma, the Suicidal Patient, Upper G.I. Bleeding, Upper Airway Obstruction in Children, Emergencies in Children, Cardiac Arrhythmias, Multiple Trauma Patients and Obstetrics and Gynecological Emergencies.

Plans call for seven of the speakers to be in state and four to be recruited from out of state. In addition to the plenary sessions, there will be two breakfast meetings which will be called "Breakfast with the Faculty." These will occur on both Friday and Saturday mornings from 7:30 to 8:30 AM. They will consist of groups of about ten physicians who will be seated at a breakfast table with one faculty member. There will be no formal didactic presentation, but rather it will be an opportunity to allow participants to discuss various problems on a face to face basis with the faculty members. □

AMA Commends Proposal Restricting Payment For Drugs

The American Medical Association commends the Health Care Financing Administration (HCFA) for its proposal prohibiting payment for certain drugs under the Medicare and Medicaid programs. However, AMA foresees that two areas of the proposal could cause problems.

AMA spokesmen have addressed HCFA and the Department of Health and Human Services (HHS) about HCFA's proposed regulations

prohibiting payment for certain drugs under Medicare and Medicaid. The drugs involve three categories which have been termed "less than effective" by the Food and Drug Administration (FDA). The first category includes drugs which were formerly approved for marketing by the FDA and later determined to be "less than effective." The second group includes generic drugs which have been marketed under different names or by different firms and have not received independent FDA approval. The third category includes drugs that are still subject to pre-marketing FDA approval but have been introduced in certain states via state law without FDA's approval. This group of drugs is eligible for Medicaid reimbursement in states permitting the use of these drugs. HCFA's proposal would no longer grant reimbursement for drugs in this category. An exemption to the proposal would still allow reimbursement for some of the experimental cancer drugs classified as Class C drugs according to FDA protocols.

The AMA spokesmen said the association favors the proposal in its general form, but they pointed out two areas AMA cites as problems in the proposal.

They said AMA believes the proposal needs to include a method for informing prescribers about HCFA's termination of reimbursement for the involved drugs. AMA says the department's legal obligation to record such action only in the *Federal Register* is not sufficient. The spokesmen recommended that letters be mailed to beneficiaries who would be affected if this proposal is adopted. They also suggested that the proposal be printed in FDA's drug bulletin in an effort to inform a majority of the physician population.

HCFA has stated that it does not intend to reimburse for those drugs which are involved in an appeal or court stay pending FDA's final ruling on the drug. AMA says this action is not consistent with the fundamental fairness and due process concept. It also says that denying reimbursement under such circumstances would deny Medicare and Medicaid beneficiaries access to a drug that would continue to be legally available to other patients.

AMA says these two problems should be remedied before a final decision is made on the proposal. □

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Medical Staff: Friend or Foe

Are you a medical staff physician with the frustrations of having limitations imposed upon your hospital practice? In addition, do you feel the burden of potential liabilities as a medical staff member? If so, the American Medical Association hopes to alleviate some of these problems for doctors in a seminar entitled "Medical Staff: Friend or Foe?" to be held November 6-8 in New Orleans, LA.

The seminar will focus on five major functions of the medical staff; a physician's liability resulting from the poor judgment of another medical staff member; the line of demarcation between private practice and hospital practice; the evaluation of individuals for membership and privileges; the professional demands upon individual staff members and satisfying the requirements of the Joint Commission on Accreditation of Hospitals.

Other information will include the background of issues and the demands placed upon medical staff. Among these topics will be cost containment, planning, third-party accountability and the specialized information and skills necessary to deal with hospital administrations, hospital staffs, fellow medical staff members and others having influence on the practice of medicine.

For further information contact AMA Department of Hospitals and Health Facilities, 535 North Dearborn Street, Chicago, IL 60610, 312 751-6654. □

AMA Supports "Good Samaritan" Bill

The victim of an emergency medical problem while in flight on an air carrier cannot be assured of medical assistance because the risk of civil liability is too great. In an effort to help reduce this risk, the American Medical Association has announced its support of HR 3203. The bill endorses a "Good Samaritan Act" for medical emergencies aboard aircraft.

Physicians and other licensed medical personnel would be protected against civil liability if the bill is passed. Such relief would encourage more prompt emergency medical attention on an air carrier should the need arise.

The bill also offers protection to air carrier employees who would render medical attention in an emergency situation. HR 3203 further safeguards the owner or operator of any aircraft, cockpit crew, cabin attendants and employer of any protected employee.

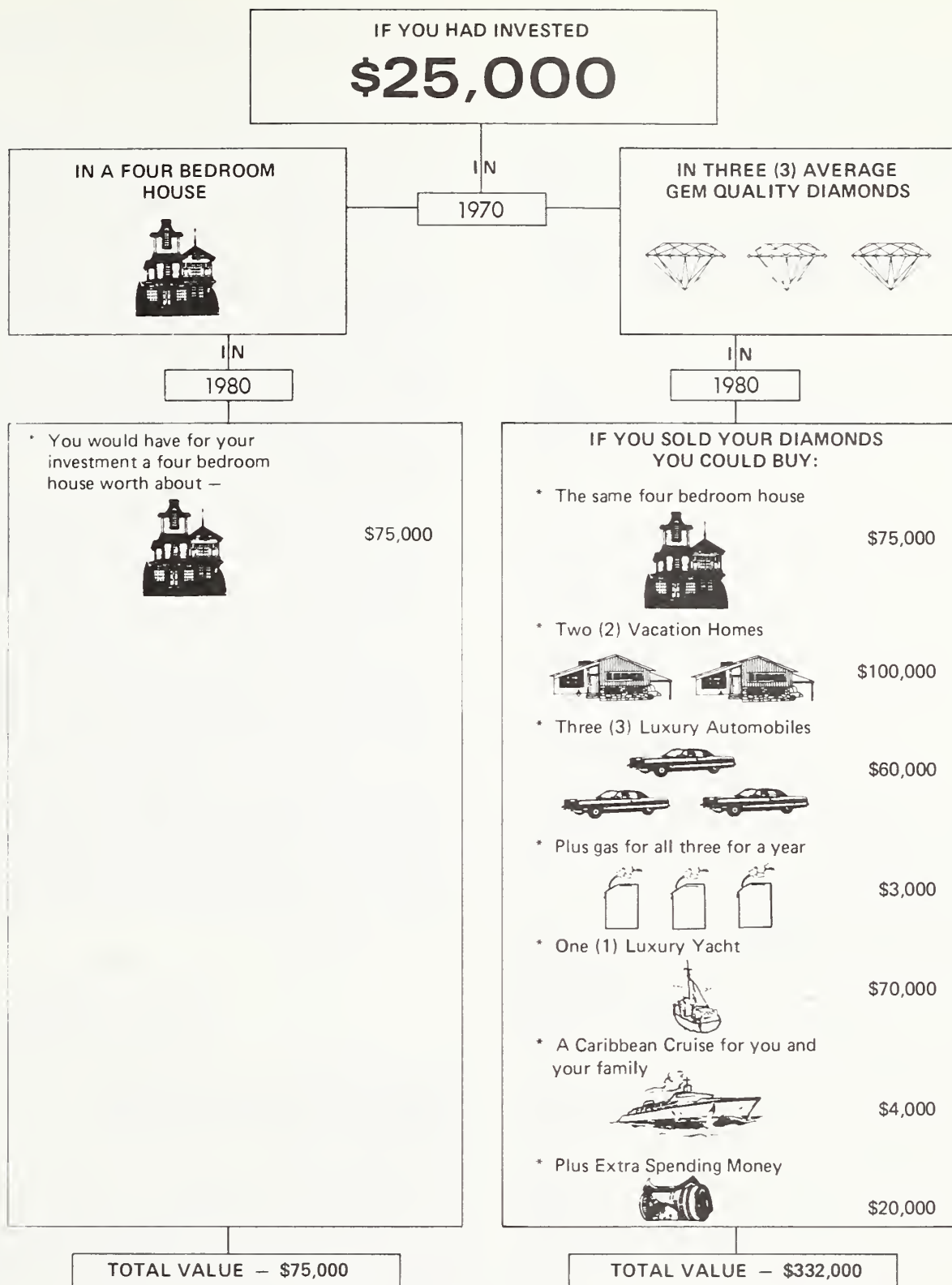
Health care services aboard an air carrier are definitely limited and for this reason AMA supports HR 3203 even if air carrier personnel should need to administer the medical attention (AMA does encourage the development of medical emergency training programs for air carrier flight crew members). The association also recognizes the need to assure passengers of medical assistance if they should need it while in flight. □

1981 OSMA ANNUAL MEETING

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New Drug Controls Epilepsy

An anti-convulsant drug is useful in controlling seizures and in improving behavior of patients with epilepsy reports a recent article in the *Journal of the American Medical Association*.

The report cited the use of valproic acid alone and combined with other anti-convulsant drugs in 100 children with epilepsy. The children differed in their types of seizures but the report indicated that all of them experienced improvement. Positive changes were even occurring in children having mental and physical handicaps. The report said children having petit mal seizures experienced the best results.

David L. Coulter, MD, University of Michigan Medical School said changes in the alertness and behavior of the children were especially noticeable. He said such changes could have resulted from reduced number of seizures or reduced dosages of sedatives but he also pointed out that three of the responses disputed this possibility. They remained alert despite having frequent seizures and continued high doses of sedating drugs.

The article included comments from others about the changes in these children. Some of the comments include the following: "He has learned more in one week than he had in the past three years."

"It is like having a new child in the family."

"He is now discovering the world he has been sleeping through."

Doctor Coulter continued follow-up studies of these children for six months after he prepared his article for JAMA. He said the children continued to improve. □

HELP NEEDED Medical Officer (Occupational Medicine)

A Medical Officer (Occupational Medicine) vacancy exists in the Occupational Medicine Division at Tinker AFB. The salary range is \$30,000 to \$38,000 depending upon qualifications. For additional information or application forms, please call Mrs. Sue Castell, 405 734-5087 or write to: Employment Office 2854ABG/DPCSE, Tinker AFB, Oklahoma 73145.

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A Defense For Electronic Fetal Monitoring

Some experts question the continued use of electronic fetal monitoring (EFM) during pregnancy and labor while others believe its use is justified.

A recent article in the *Journal of the American Medical Association* explained that the use of electronic fetal monitoring is being challenged because some believe it is unnecessarily invasive of the expectant mother and unborn child. They also say electronic fetal monitoring is too costly.

In defense of the electronic device a physician from Yale University Medical School cited several studies indicating the success of EFM equipment. Its capacity to detect changes in fetal heart beats and uterine contractions enables physicians to know immediately when a problem in delivery must be corrected.

The physician said such benefits seem to justify the expense and continued use of EFM. He also said that better and less costly equipment probably will be available in the future if bioengineers, physicians and industry continue to work together in making advancements with electronics. □

Publications Announce Medical Practice Needs

Physicians seeking practice opportunities and communities needing physicians could be interested in two publications recently released by the American Medical Association's Physicians' Placement Service.

The Opportunity Placement Register lists thousands of openings for physicians which have been indexed according to specialty, type of practice, location and size of community, date of availability, financial arrangements and other data.

For those on the other side of the fence the *Physician Placement Register* contains the coded resumes of physicians who want to relocate.

Additional inquiries can be made by contacting the Physicians' Placement Service, AMA headquarters, 535 North Dearborn Street, Chicago, IL 60610. □

Plans Complete For Lupus Symposium

In conjunction with the observance of National Lupus Week, the Oklahoma Lupus Association will sponsor a symposium on Saturday, October 18. Meeting site will be the University of Oklahoma College of Nursing, 1100 North Stonewall, Oklahoma City.

Guest speakers for the five-hour program will be Nancy L. Dawson, MD, Oklahoma City dermatologist; Samuel R. Oleinick, MD, immunologist, University of Oklahoma Health Sciences Center (OUHSC); D. Richard Ishmael, MD, immunologist/oncologist/research investigator, OUHSC; and James W. Hampton, MD, hematologist/oncologist, OUHSC.

The Oklahoma Lupus Association is a Chapter of the Lupus Foundation of America, Inc. and is dedicated to focusing both lay and professional attention on this widely-spread but little-known disease. Aim of the organization is to provide education and emotional support to patients and their families while stimulating research on the disease.

Official programs and advance registration forms are available from the Oklahoma Lupus Association, 6521 N.W. 30th Terrace, Bethany, OK 73008 or calling 341-5840. □

Children Suffer From Inhaling Grass Heads

Small grass flower heads are a health hazard to small boys and girls according to an article in a recent issue of the *Journal of the American Medical Association* (JAMA). The journal cited the cases of several small children who had developed serious health problems from inhaling the flower heads of timothy grass. They involved boys ages ten years, four years and 18 months and a 19-month-old girl. The oldest child had suffered for ten months until doctors could locate and remove the small particle of the plant. After its removal the child recovered immediately.

Lodged grass heads are usually located in the right bronchial area and correction of the problem can even involve chest surgery.

Doctor David L. Digeon, Upstate Medical Center, State University of New York, Syracuse reported in the article that the diagnosis and removal of a lodged grass head is difficult for physicians because the inhaled substances are so small.

Timothy flower heads having short, fine shaft spikelets normally packed closely together often cause stationary obstructions.

The most common symptoms resulting from inhaled particles of grass flowers are chronic cough, intermittent fever, lethargy, loss of appetite and failure to grow. Stomach pains have also occurred in some of the sufferers. The article reported that one death has resulted from this particular health problem. □

New Vaccine Reduces Number of Anti-Rabies Injections

A bite from an animal suspected of having rabies has always meant a painful course of 21 injections to keep a human victim from getting the disease. However, a new vaccine may reduce the number of injections to only five.

The *Journal of the American Medical Association* has included an article reporting studies on this new vaccine. It's called Human Diploid Cell Vaccine (HDCV).

Within a two-year period, 255 people were treated with it and none of them has developed rabies. In addition to involving only five injections another improvement of this new vaccine is that the reaction rates seem low. The older vaccine caused frequent and sometimes serious side effects.

HDCV has been licensed by the Food and Drug Administration and is now available to physicians. It is manufactured by Wyeth Laboratories.

The new vaccine is similar to the old one in that the blood component, rabies-immune globulin must still be administered with the vaccine. However, the report also indicated that rabies-immune globulin may not be needed in the future because HDCV is a more potent vaccine than the older one. □

FOOTBALL TICKET SERVICE

Physicians who have tickets to OU home games but who cannot attend are encouraged to contact Richard Hess at OSMA. In many cases OSMA can find buyers for your tickets.

Calendar of Events

Continuing Medical Education

October 31-November 1, 1980—ADVANCES IN HUMAN GENETICS: CLINICAL APPLICATIONS, Sheraton Century Hotel, Oklahoma City, Sponsored by Presbyterian Hospital, Call 405 271-6447.

November 8, 1980—FIRST ANNUAL ACS ONCOLOGY SYMPOSIUM—GU MALIG-NANCIES, Shangri-La, Afton, Oklahoma, Sponsored by the American Cancer Society and the Oklahoma Medical Research Foundation, Call Dr Richard Bottomley 405 235-8331.

November 12-13-14, 1980—THE INITIAL MANAGEMENT OF MEDICAL EMERGENCIES AND GYNECOLOGICAL-OBSTETRICAL EMERGENCIES, Ben H. Nicholson Tower, Sponsored by Oklahoma Children's Memorial Hospital, Call 405 271-6447.

December 5-6, 1980—GASTROINTESTINAL MOTILITY: CLINICAL RELEVANCE & RECENT ADVANCES, Sheraton Century Hotel, Oklahoma City, Sponsored by Presbyterian Hospital, Call 405 946-0548.

December 27, 1980 to January 3, 1981 — OKLAHOMA PHYSICIANS WINTER SEMINAR, Copper Mountain, Dillon, CO, Sponsored by University of Oklahoma College of Medicine, Call 405 946-0548.

Other Dates

November 16, 1980—OSMA Board of Trustees meeting, OSMA headquarters, 601 NW Expressway, Oklahoma City.

May 7-10, 1981 OSMA Annual Meeting, Shangri-La, Afton, Oklahoma.

Physicians who are interested in submitting information for the Calendar of Events should contact the Oklahoma State Medical Association two months prior to publication. Call 405 843-9571 ☐

Fly Eggs Cause Skin Irritation

Skin lesions that don't heal well could be caused by flies says a report issued by the American Medical Association.

Flies classified in the variety Diptera frequently cause skin irritation on animals and even humans.

The eggs of these flies usually become embedded beneath the skin. After the egg hatches a small worm or larva causes an elevated skin lesion known as cutaneous myiasis. The lesion will not heal until the larva is removed.

In North America Diptera flies usually attack cattle, dogs, cats and other small animals. However, cases involving children have also been reported.

Infestations of this type in humans occur more frequently in travelers who have been in tropical regions such as Africa. The flies lay their eggs on the cool, moist beaches of these areas where swimmers become infected. Flies in the tropical regions also lay their eggs in damp clothes that have been left out to dry. While the clothing is being worn the eggs become embedded under the skin.

Humans are usually infected in the moist areas of the body including the eye, ear, nose, tongue and in open wounds. ☐

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IN MEMORIAM

1979

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<i>Walter H. Dersch, Jr., MD</i>	<i>August 26</i>
<i>Caspar A. Hicks, MD</i>	<i>August 27</i>
<i>William R. Schmieding, PhD</i>	<i>September 16</i>
<i>Ernest Lachman, MD</i>	<i>September 21</i>
<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>	
<i>Johnny A. Blue, MD</i>	<i>January 31</i>	
<i>Merle L. Whitney, MD</i>	<i>February 4</i>	
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>	
<i>Charles H. Eads, MD</i>	<i>March 8</i>	
<i>Paul C. Gallaher, MD</i>	<i>April 20</i>	
<i>Ennis M. Gullatt, MD</i>	<i>April 26</i>	
<i>John E. Highland, MD</i>	<i>April 28</i>	
<i>H. Violet Sturgeon Minton, MD</i>	<i>April 29</i>	
<i>Elton W. LeHew, MD</i>	<i>May 3</i>	
<i>C. W. Arrendell, MD</i>	<i>May 6</i>	
<i>Edward A. Abernethy, MD</i>	<i>May 9</i>	
<i>William F. Thomas, Jr., MD</i>	<i>May 17</i>	
<i>Robert C. Lawson, MD</i>	<i>May 17</i>	
<i>Robert L. Lembke, MD</i>	<i>June</i>	
<i>Joseph Fulcher, MD</i>	<i>July 2</i>	
<i>Emmett O. Martin, MD</i>	<i>July 15</i>	
<i>James R. Colvert, MD</i>	<i>July 22</i>	
<i>Thomas J. Hardman, MD</i>	<i>July 24</i>	
<i>Kelly M. West, MD</i>	<i>July 28</i>	
<i>Tom S. Gafford, MD</i>	<i>August 4</i>	□

Book Reviews

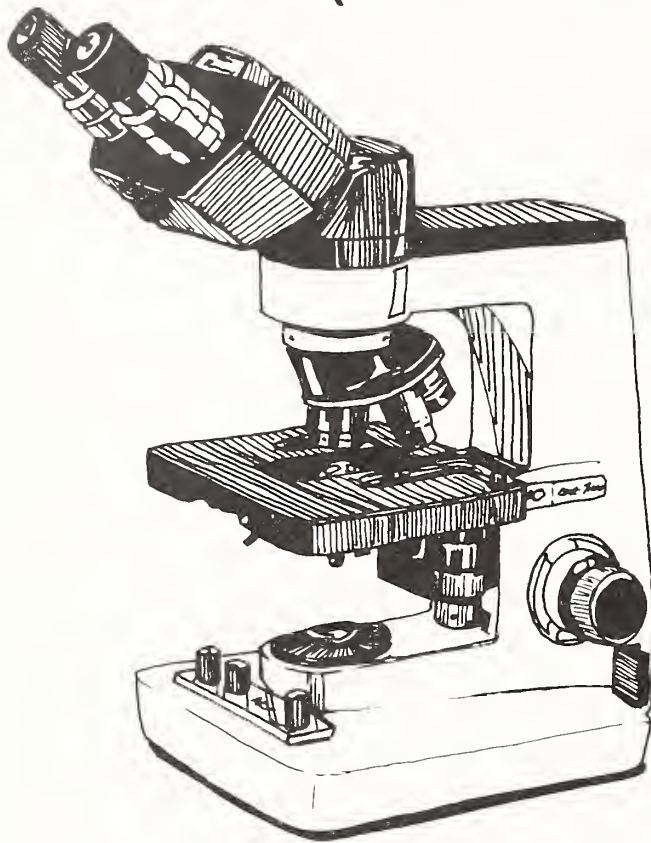
Atherosclerosis: Its Pediatric Aspects. Edited by William B. Strong. New York: Greene and Stratton, Inc, 1978, 330 pages, illus. \$34.00, ISBN 0-8089-1113-9.

Doctor William B. Strong, Professor of Pediatrics at the Medical College of Georgia in Augusta, and 29 collaborators have produced an excellent monograph. It is not, however, only a book about pediatric cardiology or about atherosclerosis. It is, rather, a review of the nature, etiology and possible prevention of atherosclerosis and its sequelae, with emphasis on the possibility that atherosclerosis originates in childhood and on the advisability of early preventive measures.

In the first chapter, Dr Strong provides an excellent overview of the problem. He acknowledges the pioneer work of Holman and his colleagues who, in 1961, emphasized the role of pediatric nutrition in the etiology of atherosclerosis. Strong emphasizes the seriousness of atherosclerosis. About 5% of all adults between 18 and 79 years of age have coronary heart disease, and 60% of these individuals are less than 65 years of age. Every year approximately one million persons in the United States experience either a myocardial infarction or sudden coronary heart disease death, and 12% of the deaths occur in persons under age 65. At the present time, a middle-age North American man has a one in five chance of developing clinical coronary heart disease (most commonly, myocardial infarction) before his sixtieth birthday. This is one of the highest incidences in the world. Atherosclerosis is the leading cause of death in the United States and Canada. The estimated cost of atherosclerosis in the United States in 1970 was \$25 billion. Strong also places particular emphasis on risk factors — arterial hypertension, hypercholesterolemia and cigarette smoking.

In the next 15 chapters, the book covers the natural history of atherosclerosis, the experimental disease, the role of lipids, hypertension, smoking, obesity, sedentary living, and other factors in the disease process and possible means of prevention. There are chapters dealing with non-human primate models with atherosclerosis and several excellent chapters dealing with risk factors as they occur in childhood — serum lipids and lipoproteins, hypercholesterolemia, and hypertension. The

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discussion of prevention includes nutritional considerations, exercise, and other approaches. The chapters on experimental atherosclerosis in primates and on the influence of physical exercise are especially well documented.

This book marshals considerable evidence to support strongly the thesis that atherosclerosis is a pediatric problem. It is an important addition to our libraries. *Harris D. Riley, Jr., MD*

AMA Drug Evaluations. Third Edition. Prepared by the AMA Department of Drugs in cooperation with the American Society for Clinical Pharmacology and Therapeutics. Littleton, Mass.: Publishing Sciences Group, Inc, 1977. Price \$29.50.

This is the third edition of this now recognized publication of the American Medical Association. Some 400 expert consultants, about 60 reviewers, and 20 special contributors joined with the staff of the AMA Department of Drugs to produce this edition. Despite the large

number of contributors, the written style is quite uniform and the format is a practical and helpful one.

Basically, this book consists of a review of drugs with definite emphasis on the clinical point of view. Each chapter begins with a brief summary of the disease process under consideration followed by an overview of specific drugs important in the management of that disease process. Emphasis is given to the clinical action of drugs and their potential side effects. Biochemical and pharmacologic discussions are brief but appropriate. It is written with the interest of the practicing physician in mind and there is relatively little basic science material included.

The appendix contains a very useful index of adverse drug reactions. This is in addition to the general drug index. Another useful table is that on drug interference with laboratory tests.

All in all, the third edition is significantly stronger and up-dated over the second. It does a good job in achieving its goal of presenting a practical review of currently useful drugs. *Harris D. Riley, Jr., MD* □

Relapsing Gratitude

Thanksgiving is a wonderful holiday, but it gets in my way a bit. My best thing is complaining about things that aren't perfect and when I have occasion to notice all the things that are almost perfect, my outlook gets tainted with shades of rose.

Taking time to count my blessings leaves very little time for me to do anything else. Especially when I compare my blessings with those of most of the people on earth today or even those who ever lived, I tend to lose my enthusiasm for plaintive protest. How can I decry my fate while I acknowledge — let alone *count* my blessings?

But somehow, I always manage to enjoy Thanksgiving. I don't mean just the unrestrained gluttony and the joys of an assembled, loving family and the warmth and comfort of a house that became a home a generation ago. I mean I also enjoy the whole effect of giving thanks; of finding ways to let my gratitude spill out and relieve some of the fulness in my heart. Mostly, I do this through the literal giving of thanks. I thank my patients for their thoughtfulness and their concern for my wel-

fare. I thank my colleagues for their indispensable help and their valued advice. I thank my friends for their loyalty and understanding. I thank my wife and my children for being what they are—loving, caring people who are conscientious about their obligations as parents, offspring and citizens. I thank my teachers for their inspired guidance. Above all, I thank my Creator for all these blessings and much, much more.

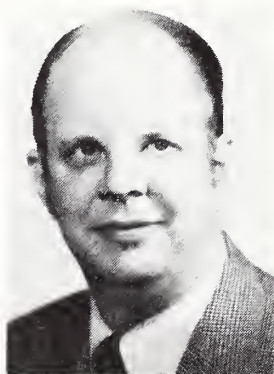
Sometimes, I am so overwhelmed with gratitude, I even find myself writing notes of thanks to some of the benefactors in whose debt I stand. Not often enough, as many of you know, but occasionally.

Fortunately, these exacerbations of maudlin humility are not permanently disabling or protracted. Thanksgiving will pass and be followed by Christmas. I will experience a brief convalescence leading to prompt recovery. I can then resume my diatribes, my pamphleteering, my griping. Unfortunately, I will probably suffer a relapse in about a year. There seems to be no permanent cure for this malady of Thanksgiving.

Hope you enjoy yours.

MRJ

It is estimated that Oklahoma physicians see somewhere between 30,000 and 40,000 patients each day. Nationwide over two million patient contacts are made daily. This represents a tremendous public relations potential, but at the same time it can also present overwhelming problems. The manner in which we approach this opportunity, I believe, will ultimately decide the fate of fee-for-service medicine. If our patients trust us, believe in us and are comfortable with us, it is highly likely that fee-for-service will be around for quite some time. If they don't trust us, don't believe in us or are uncomfortable with us, then it is highly likely that they will demand a change in the system.



Medicine has enjoyed a seller's market. But in coming years experts predict that this will be reversed and there will be a surplus of physicians. If this occurs, medicine's future will depend upon how we approach our "business."

Without being too detailed, I think it is vitally important how you and your office staff interface with your patients. For example, if your staff is rude or disinterested, it is unlikely that your patient is going to speak highly of you. Similarly, if you neglect to fully explain the medical procedure you are about to per-

form, it probably won't matter how skilled you are . . . your patient will not understand and the result will not be satisfactory to that person. A little common courtesy and understanding with our patients can go a long way; a lack of courtesy, unfortunately, can go even farther.

Each of us knows whether or not we are courteous with our patients, but I suspect most of us don't know much about how our staffs treat them. I strongly urge each of you to make public relations a part of your daily practice. Patients are more sophisticated than they've ever been, and a surplus of doctors as well as more federal regulations are potentially just around the corner.

Many of our patients feel we are more concerned about fees than we are about them. Many times this is because of the amount of information obtained from them concerning their financial ability to pay, or requiring full payment before any treatment is given. If we expect to be recognized as an honored profession as we were in the past, we must let the patient know we are more interested in him than his checkbook. Office management is extremely important, but it must benefit the patient as well as the physician.

What each of us does each day matters a great deal. Just ask any of your patients.

Floyd S. Miller, M.D.

Malignant Melanoma: Current Trends and Future Prospects

J. LEE MURRAY, MD
ROBERT H. SCHOSSER, MD
RICHARD H. BOTTOMLEY, MD

The incidence of human malignant melanoma is increasing in this country. Current treatment modalities and future plans toward halting the spread of this disease are discussed.

Malignant melanoma remains the nemesis of surgeons, oncologists and dermatologists alike due to difficulties in recognition and its unpredictability. According to a 1974 survey on skin cancer in the United States and Canada, melanoma incidence appears to be on the increase, with a gradual shift toward younger age groups. Moreover, death rates have doubled over the last 15 years. For this reason, current research into the etiology, immunology and treatment of this disease continues at major centers throughout the world.

ETIOLOGY OF MALIGNANT MELANOMA

The cause of melanoma remains a mystery, but recent epidemiologic studies have shed

Supported by grant No. CA 16957 from the National Cancer Institute, DHEW.

some light on this problem. Sunlight exposure and particularly latitude appear to play a role; persons living in areas closer to the equator have a greater mortality than individuals residing in more temperate zones.¹ Scientists have postulated that an increase in ultra-violet exposure due to gradual dissipation of the ozone layer may be responsible for this increase.² Cohort analysis revealing an increase of lower extremity melanomas in women as well as trunk melanomas in men since World War II has been explained by a switch from opaque stockings to nylons and an overall trend to go shirtless. These explanations are really an attempt to simplify a complex problem. In Israel a higher incidence of melanoma was noted in European-born Jewish farmers living on the seacoast than inland city dwellers.³ The Finnish cancer registry recorded a higher incidence among urban populations, however.⁴ Numerous studies have determined that the fair-haired, blue-eyed, melanocyte-poor individual is at greatest risk, particularly if he is a sun-worshipper. In contrast, melanoma in the American Negro accounts for only 0.2% of cases and lesions are universally found on depigmented areas such as palms or soles.⁵ Interesting data from the Third National Cancer Survey revealed a minor association of melanoma with increased alcohol consumption as well as among college male graduates or persons in a high income bracket.⁶ The correlation of alcohol with breast and thyroid cancer incidence led to the

hypothesis that these malignancies may be induced by hormone increases secondary to the drug's effect on the pituitary (ie, increased prolactin, MSH, TSH).⁷ Unfortunately, there is as yet no solid clinical evidence to support such a theory.

DIAGNOSIS OF MALIGNANT MELANOMA

The three most common types of melanoma seen in general practice are superficial spreading melanoma, accounting for approximately 60% of cases, nodular, accounting for 15% and lentigo maligna responsible for about 5% of cases.⁸ (Fig 1) The clinical behavior of these three types is quite different. Superficial spreading melanoma, for example, begins as a relatively flat irregular lesion which tends to spread laterally for many years prior to descending vertically into the dermis. Nodular

melanoma, on the other hand appears as a raised, blueberry-like lesion which lacks the superficial spreading phase. The rapid vertical growth associated with this variant accounts for its poorer prognosis. In contrast, lentigo maligna or "Hutchinson's freckle," which appears in older individuals and is closely related to sun exposure, has a very long lateral growth phase and rarely penetrates the dermis. Hence, its relative benignity as compared to the other two.

Patients often present with the chief complaint that a mole which had been present for several years suddenly began changing in size, color or consistency. Any one of these three warning signs is an indication for biopsy with incisional biopsy preferable to punch biopsy in order to preserve tumor architecture. Despite a history which may suggest development of malignancy in a benign junctional nevus, the majority of cases arise spontaneously. An exception to this is seen in persons with a

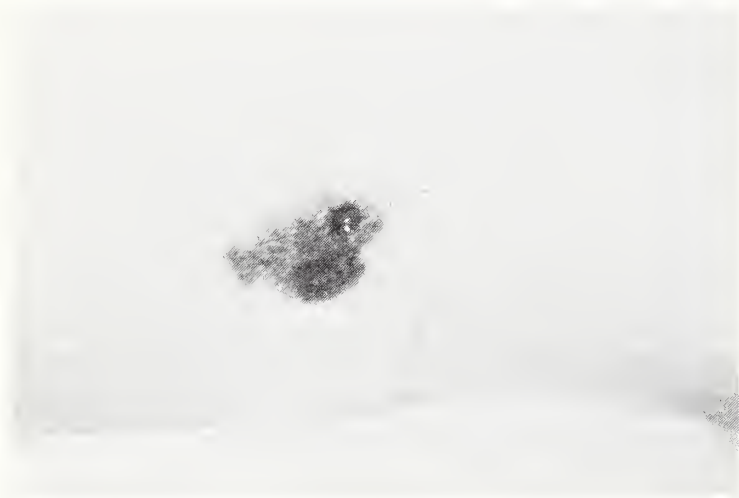


Figure 1A



Figure 1B

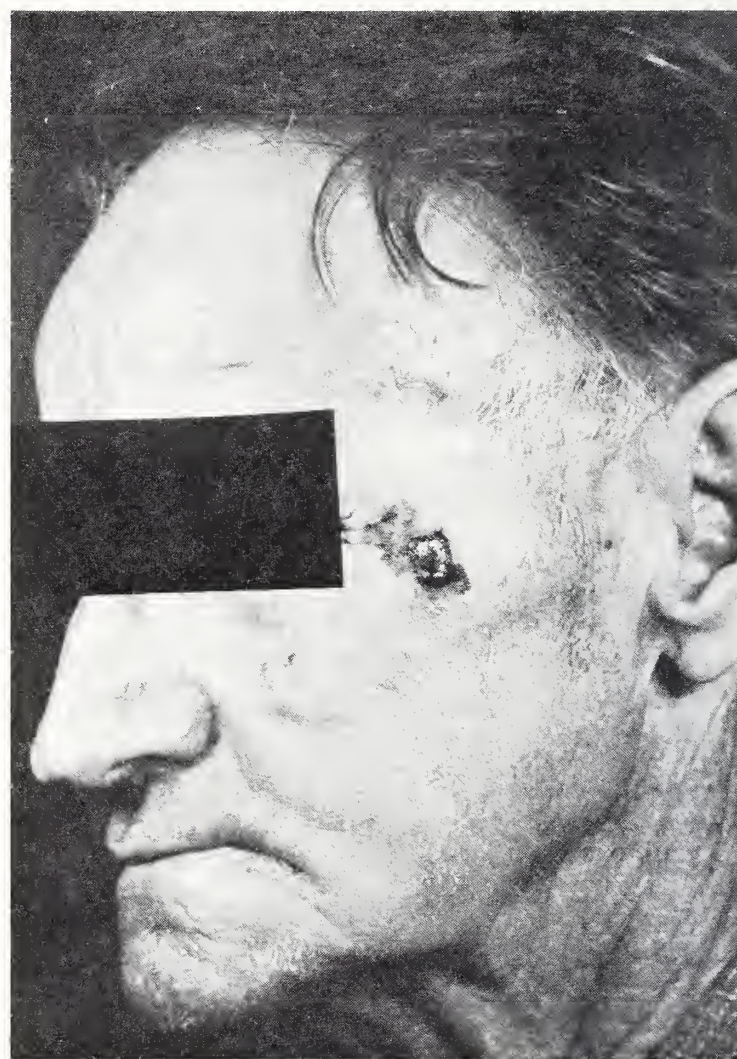


Figure 1C

Figure 1: Three commonmost presentations for malignant melanoma a) superficial spreading b) nodular c) lentigo maligna.

hereditary variant, the "BK mole syndrome." This syndrome is characterized by the presence of multiple large brown moles over the upper trunk which may undergo malignant degeneration. Persons with this disorder develop malignancy at a younger age and have multiple primaries, yet actually survive longer than those with the spontaneous variety.⁹

PROGNOSTIC FACTORS IN MELANOMA

The two most important prognostic factors in this disease are primary depth of invasion and stage. In 1969, Wallace Clark proposed a pathological staging system based on the depth of tumor invasion into the dermis.⁸ Persons with tumors invading the reticular dermis or subcutaneous fat (Levels IV and V) had a worse prognosis than individuals with only

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Robert H. Schosser, MD, was graduated from the University of Louisville School of Medicine in 1970 and is now certified by the American Board of Dermatology. Doctor Schosser is assistant professor of dermatology and chief, Dermatology Group, at Wright State University, Dayton, Ohio. He is a member of the American Academy of Dermatology, the Society for Investigative Dermatology and the Southern Medical Association.

Richard H. Bottomley, MD, was graduated from the University of Oklahoma Health Sciences Center where he is now professor of medicine. Doctor Bottomley is certified by the American Board of Internal Medicine and specializes in medical oncology. He is a member of the American Society of Clinical Oncology, the American Association for Cancer Research, the American Society of Hematology, the Southwest Oncology Group and a Fellow of the American College of Physicians.

papillary dermis invasion (Level III). Another popular classification is that of Breslow where depth is recorded in terms of millimeters as measured by micrometer.¹⁰ Patients with lesions greater than 1.5 mm in thickness have a high likelihood of regional disease and those with deep lesions (> 4mm) have a high incidence of distant metastases at the time of primary surgery.¹¹ Of further prognostic importance is that the incidence of submicroscopic regional lymph node involvement (ie, non-palpable nodes) increases progressively with a 60-70 percent likelihood of positivity for Clarks level IV-V lesions.¹²

Patients with regional node involvement (Stage II) have a worse prognosis compared to individuals with local disease (Stage I) regardless of depth of the primary. Persons with disseminated disease (Stage III) have an overall five-year survival of 17%. Patients in this group who have skin, lung or distant lymph node involvement tend to survive longer than those with other visceral disease. Overall, females survive longer than males regardless of stage.¹³ The reason for this is unknown, but it is speculated that endocrine status may play a role. Furthermore, persons with extremity lesions have a better prognosis than those with trunk lesions. This may be due to the fact that females tend to have disease of the lower extremity and males a greater incidence of trunk melanoma.

TREATMENT

Ever since Dr Sampson Handley's elaborate discourse to the Royal College of Surgeons in 1907 describing invasion of microlymphatics and blood vessels in primary melanoma, wide excision with or without skin grafting has been employed.¹⁴ Recommendations ranging from contiguous node dissection to radical amputation prevailed with evidence that neither modality was curative, particularly if regional nodes were involved. A swing toward conservatism has evolved since two recent randomized controlled trials indicated that survival was not compromised whether one did prophylactic node dissection or not.^{15, 16} Caution should be used in evaluating these studies in that trunk melanomas were not included, females predominated over males in the Veronesi study, and the Mayo clinic trial is too early to evaluate fully. As a "middle-of-the-road" approach we recommend nodal dissection for poor prognostic lesions (ie, > 1.5 mm thick-

TABLE I
Nonspecific Immunostimulation in the treatment of Malignant Melanoma

Postsurgical Trials				
Morton et al. ²⁰				
Treatment (Stage II)	Tice BCG (84)	HC (42)		
Recurrence Rate (2 year)	30%	75%		p<.01
Treatment (Stage II) ²¹	Tice BCG (32)	PRC (28)		
Survival:				
1 year	100%	80%		p=NS
2 years	67%	35%		p=NS
Pinsky et al. ²²				
Treatment (Stage II)	Tice BCG	PRC		
Survival:				
3 years	65%	54%		p=NS
Intralesional Therapy				
Cohen et al. ²⁴				
Treatment	BCG	DNCB		
No. of lesions responding				
Intradermal	157/177 (90%)	453/504 (90%)		
Subcutaneous	10/22 (25%)	27/63 (43%)		

PRC = prospective randomized control; HC = historical control; NS = Non-significant
DNCB = Dinitro-chloro-benzene; BCG = Bacillus Calmette Guérin

ness, level IV-V) chiefly for downstaging purposes. Certainly all clinically palpable nodes should be removed.

In the early 1960's and late 70's several trials using prophylactic limb perfusion with melphalan appeared in the literature.¹⁷⁻¹⁹ These were non-randomized and demonstrated a significantly decreased incidence of local recurrence as well as prolonged survival compared to a historical no treatment arm. A larger randomized trial is needed. Currently, the major value of perfusion lies in treating regional recurrent disease.

ADJUVANT THERAPY

Countless studies evaluating the effect of adjuvant immunotherapy alone, chemotherapy, or combined chemotherapy are in progress. The major published trials have studied the effects of BCG given to patients with regional resected disease. (Table I) Eilber and Morton, for example, demonstrated an improved disease-free interval and survival in postsurgical Stage II and III melanoma patients treated with BCG compared to non-treated historical controls.²⁰ A randomized controlled study by the same investigators failed

to confirm these original results, however.²¹ Pinsky et al, could demonstrate no benefit using BCG in a randomized controlled study, although the strain of BCG used as well as location of inoculation was different.²²

Immunotherapy definitely plays a role in controlling local skin metastases. Several reports have documented significant regression of intradermal lesions injected with BCG and more recently dinitro-chloro-benzene (DNCB) (see Table I).^{23, 24} In many instances surrounding non-injected lesions as well as distant metastases have regressed, emphasizing the immunologic nature of this disease.

In contrast to the above, chemotherapy or combination chemioimmunotherapy may offer some benefit in an adjuvant setting. A pilot study underway at the Oklahoma Medical Research Foundation demonstrates an improved disease-free interval in patients treated with dimethyl triazino imidazole carboxamide (DTIC) and *Corynebacterium parvum* (*C. Parvum*). (Fig 2) Previous studies by the Central Oncology Group showed modest improvement in disease-free interval in persons receiving DTIC, and an ongoing World Health Organization trial to date demonstrates survival differ-

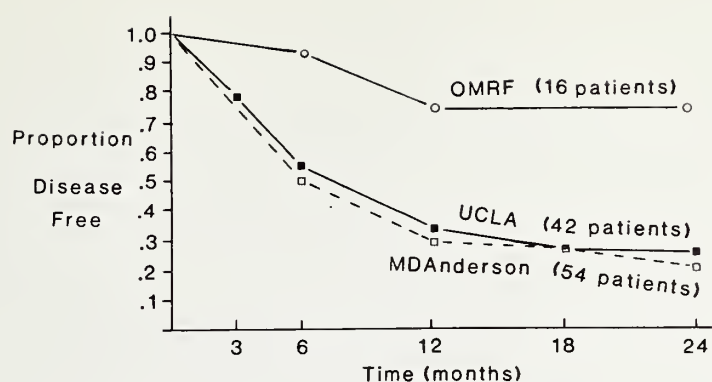


Figure 2: Recurrence rate of stage II melanoma (regional nodes and resected disease) in patients treated with DTIC plus *C. parvum* (open circles) versus M. M.D. Anderson (open squares) and UCLA historical controls (closed squares).

ences for persons receiving DTIC alone, DTIC plus BCG, and possibly BCG alone compared to no treatment.

CHEMOTHERAPY OF METASTATIC DISEASE

Treatment of disseminated disease remains discouraging. The two most effective single agents used are DTIC and BCNU, each with response rates of 20-25%.²⁵ The most effective drug regimen to date consists of DTIC, BCNU and hydroxyurea, with responses ranging from 30-40%.²⁶ Clearly more effective single agents are needed. Promising drugs on the horizon include cis-platinum, actinomycin-D, dibromodulcitol, and vitamin A.²⁷ Standard non-specific immunotherapy with BCG, *C. Parvum* or Levamisole appears to add little to chemotherapy in advanced disease.

SUMMARY

During the past decade we have seen improvement in prognosis secondary to better recognition and adequate surgical resection of primary lesions. Adjuvant therapy with non-specific immunotherapy is only minimally effective if at all, but part of the reason for discrepancies in results may be due to the lack of dosage standardization and the specific treatment site. Future efforts are being directed toward active specific immunotherapy with neuraminidase-treated tumor cells or viral-infected tumor oncolysates. A search for individual tumor-specific antigens is underway at major centers including the Oklahoma Health Sciences Center and studies to determine the nature of immunosuppression in this disease are underway at the Oklahoma Medical Research Foundation. In essence, the development of more effective chemotherapeutic agents

and the efficient use of these agents with the above modalities remains the ultimate goal for the 1980's.

ACKNOWLEDGMENT

The authors thank Mrs Ozella Robbins for excellent secretarial assistance.

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Intractable Diarrhea of Infancy

SEAN J. FENNELL, MD
FRANCIS C. RASH, MD

Diarrhea in infants usually resolves with minimal therapeutic intervention. Many physicians change formulas in infants with diarrhea but this may mask a serious problem.

INTRODUCTION

In pediatric practice diarrhea is a common problem which usually resolves with a minimum of therapeutic intervention. Occasionally however, one is faced with an infant who fails to respond to conventional therapy and progresses to a life-threatening state of intractable diarrhea with fluid and electrolyte disturbances and protein-calorie malnutrition. When this occurs in the first few months of life, a time when nutritional reserves are minimal and requirements for growth maximal, it pre-

sents one of the most difficult problems seen in pediatric practice today.

The term "intractable diarrhea of infancy" was first used by Avery et al,¹ in 1968, to describe a syndrome characterized by, (1) diarrhea of at least two-weeks duration which (2) had its onset in the first three months of life and (3) at least three stools were negative for salmonella, shigella, enteropathogenic *E. coli*, and parasites. He reported 20 infants; nine (45%) died despite all available treatment.

Since then many disorders have been associated with intractable diarrhea (Table 1) and total parenteral nutrition has been shown to reduce the mortality rate considerably.²

CLINICAL PRESENTATION

The clinical presentation is characteristic. The diarrhea is insidious in onset and usually indistinguishable from an infectious gastroenteritis. The infant fails to gain or actually loses weight, and typically several formulas are prescribed in an effort to find one which will "suit" the infant. The diarrhea often improves temporarily following a formula change. Many infants are also given clear liquids, which may lead to a decrease in the number of stools, but at the same time perpetuate the infant's hypocaloric state.

On admission to hospital dehydration and acidosis are common, as is an admission weight below the birthweight.² A history of vomiting is obtained in one-half of these infants and one-third are febrile.³

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TABLE I

Anatomical Disorders of the GI Tract
Hirschprung's Disease
Short Bowel Syndrome
Intestinal Obstruction
Intestinal Lymphangiectasia
Inflammatory Disorders of the GI Tract
Infectious Gastroenteritis
Allergic Gastroenteropathy
Cow's Milk Protein Allergy
Soy Protein Allergy
Ulcerative Colitis
Non Specific Enterocolitis
Biochemical Disorders (Enzymatic Deficiencies) of the GI Tract
Glucose Malabsorption
Disaccharidase Deficiency
A - Beta Lipoproteinemia
Congenital Bile Salt Malabsorption
Exocrine Pancreatic Insufficiency
Cystic Fibrosis
Schwachman Syndrome
Endocrine Disorders
Adrenal Insufficiency
Neural Crest Tumors
Thyrotoxicosis
Miscellaneous
Celiac Disease
Enterokinase Deficiency
Primary Immunodeficiency Disorders
Acrodermatitis Enteropathica
Renal Tubular Acidosis

PATHOPHYSIOLOGY

Though intractable diarrhea of infancy may be caused by a number of disorders, the pathophysiology is similar in all cases. Injury to the small intestinal mucosa may occur as a result of infection⁴ or malnutrition.⁵ Because of this injury, the mucosal surface area available for absorption is decreased⁶ and brush border enzymes (disaccharidases) are decreased in quantity leading to inadequate digestion of carbohydrates.⁶ Unabsorbed carbohydrates act as osmotic agents and bacterial fermentation of these sugars within the gut yields simpler sugars and organic acids which are also osmotically active. Further, there is generation of carbon dioxide and hydrogen which causes abdominal distention and pain. The presence of osmotically active particles in the gut leads to change in gastrointestinal motility and diarrhea.

Exocrine pancreatic insufficiency occurs as a

result of malnutrition⁷⁻⁹ leading to inadequate digestion of protein and fat. Bacterial contamination of the normally sterile small intestine occurs because of the motility disturbance, and contributes to the carbohydrate malabsorption referred to above and to deconjugation of bile acids.¹¹ Deconjugated bile acids are malabsorbed in the terminal ileum, and bile acid deficiency further contributes to fat malabsorption. Deconjugated bile acids upon reaching the colon cause the secretion of water and electrolytes thus resulting in further stool losses.¹² Malabsorption of fat soluble vitamins¹³ and vitamin B₁₂^{13, 14} also occur.

Thus, regardless of the initial insult, protracted diarrhea in an infant with minimal nutritional reserves leads to a vicious cycle. (Fig 1) Since early infancy is a period of rapid brain growth and starvation during the early months of life has been shown to have a deleterious effect on learning ability and memory¹⁵ these infants should be regarded as nutritional emergencies and managed aggressively.

EVALUATION

The infant's length, weight and head circumference should be measured and the amount of subcutaneous fat evaluated, either by picking a fold of skin between the fingers, or more accurately with a skin-fold thickness caliper.

A complete blood count, serum electrolytes and acid base status, liver function studies, serum albumin and quantitative serum immunoglobulins will all provide useful information.

Measurement of the stool pH (using pH indicator paper) and reducing sugars (using a Clinitest[®] tablet) together with a timed fecal fat excretion study are useful in evaluating the infant's absorptive capacity.

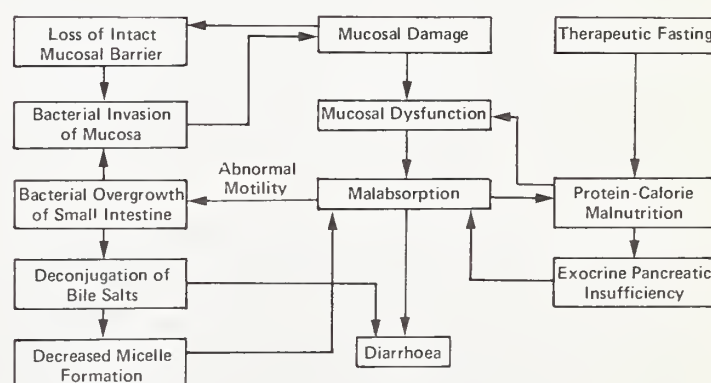


Figure 1

Specific oral carbohydrate tolerance tests and a small intestinal biopsy are of value in confirming carbohydrate malabsorption and in evaluating the degree of damage to the small intestinal mucosa.

MANAGEMENT

The aim of treatment is to break the vicious cycle shown in Fig 1, by providing nutrition adequate for normal growth and the repair of damaged tissues. This can most readily be achieved by total parenteral nutrition though some infants whose diarrheal state and marasmus are less severe can be managed by feeding a chemically defined or elemental diet.

Total parenteral nutrition is provided by infusing amino acids, glucose, minerals, vitamins and trace elements through a catheter placed into either the superior vena cava or the right atrium, where blood flow is high enough that high concentrations of glucose will not be injurious. The infusate is filtered to ensure sterility. A fat emulsion is also infused, to prevent fatty acid deficiency^{16, 17} but since fat cannot be filtered, it is delivered through a peripheral vein.

The alternative to parenteral nutrition is the continuous infusion through a nasogastric tube of a chemically defined or elemental diet.¹⁸ This has the advantage of being simpler and less expensive than parenteral nutrition and there is some evidence to suggest that direct contact of substrate with intestinal mucosa induces enzyme production in the mucosal cell

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and thus hastens the repair process.⁹ Elemental diets, however, may be malabsorbed in the severely ill infant, and therefore are generally used in infants with less severe disease. They may be used as a supplement to total parenteral nutrition or in weaning infants from parenteral to enteral nutrition.

Cholestyramine has been reported to be of value in these infants.^{19, 20} It binds bile acids²¹ and may also bind endotoxin¹⁷ but because of its potential complications [intestinal obstruction,²² hyperchloremic acidosis,²³ hypernatremia²⁴ and steatorrhea,²⁵] its use is usually confined to those patients in whom bile acid malabsorption has been confirmed.

The following is a representative case report:

T.Y. weighed 3.38 kg at birth and, soon after discharge from the nursery at five days of age, she developed explosive, watery stools and some "spitting up." She was given Enfamil[®] with and without iron, Isomil[®], Enfamil[®] again, Pet[®] milk, Similac[®] buttermilk, Pro-sobee[®] and Pregestemil[®]. Following each formula change she improved for approximately 24 hours but then again had diarrhea. When given Isomil[®], however, she screamed continually for almost 24 hours.

On admission to hospital, at age five weeks, she weighed 3.91 kg. She was allowed nothing by mouth for 24 hours and then given half-strength Pregestemil[®] which was increased to full strength over several days. When discharged at six weeks of age she was having one stool daily, and gained 42 grams each day until 9 weeks of age when she was given Isomil[®] and had diarrhea again. The Isomil[®] was discontinued after 24 hours and Pregestemil[®] resumed but from nine until 13 weeks she gained only 7.2 grams a day and was then again admitted to hospital weighing 5.43 kg.

She had watery, clintest-positive stools following challenge with glucose and fructose given in water 24 hours apart. Her small intestinal biopsy demonstrated enteritis with partial villous atrophy and levels of lactase, sucrase and maltase which were all below normal. She was given Vivonex[®] every three hours and tolerated this well. She gained weight, had virtually no stool and was therefore allowed to go home at 15 weeks of age. She did well for two weeks but then became irritable and "colicky" when fed. Her intake of formula fell and weight gain ceased.

She was therefore readmitted at 17 weeks of age and given Vivonex[®] continuously through

a nasogastric tube. She tolerated this well and gained weight. Safflower oil and later medium-chain triglyceride oil were added to the regimen.

She was then fed Pregestemil® as a continuous enteral infusion and later as bolus feedings. She tolerated this well and was allowed home at 23 weeks weighing 8.09 kgms, and ingesting 32 ounces of Pregestemil® each day.

Since discharge she has thrived and her diet now includes sucrose. The major problem following discharge has been to persuade her to pay attention to feedings; after many weeks of nasogastric feedings, she had forgotten how to suck.

SUMMARY

Intractable diarrhea presents a major diagnostic and therapeutic challenge to the pediatrician. An ordered approach to diagnosis is essential in order to identify those infants with a specific problem, for whom a specific therapy is often available. Regardless of etiology however, the early use of appropriate nutritional support will not only reduce morbidity and mortality but will also prevent the long term consequences of malnutrition.

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W. Walter Menninger, MD, of Topeka, Kansas was the annual lecturer of the History of Medicine on March 6 and 7, 1980, at the University of Oklahoma Health Sciences Center. On the evening of March 6, Interim Provost Donald B. Halverstadt, MD, presided at the Annual History of Medicine Dinner Meeting, attended by over 140 students, faculty, and professional and lay representatives of the community.

R. Palmer Howard, MD, announced that the annual meeting was dedicated to the memory of the late Ernest Lachman, MD, who among his many interests had served as sponsor of the History of Medicine Society. Mark R. Johnson, MD, then delivered a moving tribute to Dr Lachman, Regents Professor Emeritus of Anatomy and Radiological Sciences. His personal influence will remain ever in the hearts and minds of more than forty-five classes of students and faculty colleagues.

Dr Menninger gave an interesting address entitled "A Psychiatric Perspective of Medical History." The following day, under the sponsorship of the student council of the College of Medicine, Dr Menninger presented the Annual Lecture.

A Psychiatric Perspective of Medical History

W. WALTER MENNINGER, MD

Despite incredible developments in the technology of medical practice and the virtual elimination of certain diseases, some things have not significantly changed throughout the recorded history of medicine: the basic psychological needs of our patients.

INTRODUCTION

It is both a special privilege and satisfaction for me to be with you this evening, returning to the University of Oklahoma Medical Center where not quite 19 years ago I had an appointment as a Visiting Lecturer in the Department of Psychiatry and Behavioral Science. At that time, I was in the United States Public Health Service, assigned to the Federal Reformatory in El Reno as the chief medical officer and psychiatrist.

My satisfaction stems also from the invitation of Stephen Kowalski, President of the History of Medicine Society, to give this address; since his father was for many years a close

friend and colleague in Topeka. As I am sure you can appreciate, a request coming from the son of an old friend merits an extra special consideration.

In addition, I found it a bit of a challenge to collect my thoughts on this topic. In medical school at Cornell a quarter of a century ago, we did not have any significant focus on medical history, except as it might pertain directly to some background in physiology or pathology or bacteriology or the like. The emphasis was on learning today's knowledge, without any attempt to put that in perspective of the past.

Nor was I aware of any particular motivation on the part of my fellow students to study medical history. We were all too preoccupied with mastering all the knowledge we had to assimilate to become doctors for the present. How we got to where we were seemed of little consequence, if not completely irrelevant.

Increasingly, I have come to ponder on the reasons why youth is so resistant to appreciating history. Or at least why I as a youth was so resistant, though I think some generalization is possible. In my undergraduate years, I knew some history majors, but they were few and far between. I never felt I fully appreciated the basic course on the History of Western Civilization, which was a freshman requirement at

Stanford when I matriculated. I always thought I would have gotten much more out of the course if I had taken it as a senior instead of a freshman.

I think the resistance is, in part, a function of the future orientation of youth which is impatient to grow and go forward, and which wishes to deny the past, the period of childhood. At the same time, in the headlong rush to achieve maturity, youth tends to reject the wisdom of seniors. I am reminded of the experience in the early days of the Peace Corps, when the third contingent of volunteers sent to Colombia, South America, was assigned to work with and learn from the first contingent, which was finishing out its service. All too often, the Colombia I group tried to direct their successors in ways to maximize their effectiveness, only to be met by the protest from the Colombia III volunteers who insisted that they wanted to make their own mistakes!

As a parent, I have come to realize that I cannot do it all for my children, and they are going to have to make their own mistakes. I try to pass on what I can from my learning, but they have their own agenda and may or may not appreciate my wish to help them learn from history.

Samuel Taylor Coleridge put it this way:

If men would learn from history, what lessons it might teach us! But passion and party blind our eyes, and the light which experience gives is a lantern on the stern, which shines only on the waves behind us!

I would only add, that in addition to passions and party, egocentricity and immaturity likewise blind our eyes to fully appreciating what we can learn from the past.

SOME THOUGHTS ON MEDICAL HISTORY

At any given point in time, it is always difficult to keep life in full perspective. We take so many aspects of medical diagnosis and treatment for granted now, it seems inconceivable that our forebears had to care for their patients with so little in the way of the pharmacological aids which we have today, or the diagnostic procedures.

It is hard to conceptualize what practice must have been like, for instance, for my grandfather as he carried out his general practice at the turn of this century. I can recall the stories of his making house calls from dawn til long after dark, having to then look after the

horse when he got home.¹ There was so little he could do in the way of meaningful treatment for his patients — at least when you think of how we think of treatment today. The drugs at his disposal for the treatment of infection were minimal. Many of the diseases with which he had to cope are encountered infrequently in this day and age, or else are dealt with perfunctorily with the wide range of antibiotics and antimicrobial drugs in our therapeutic armamentarium.

Circumstances were little different when my uncle and father took their medical training. Dr Karl Menninger, my uncle, has often recalled² the remarkable development in 1906 of the Wasserman test, which finally exposed the tremendously widespread prevalence of syphilis. And the introduction three years later of the arsenical product 606, following 605 failures, which was more toxic to syphilitic organisms than to the human organism. This dramatic event marked the first disease-specific anti-infection drug — all this only 71 years ago, within a human lifetime.

It is no less mind boggling to me to think that it was only in 1912 that James B. Herrick published his classical paper on "Clinical Features of Sudden Obstruction of the Coronary Arteries" in the *Journal of the American Medical Association* and sharply delineated the syndrome of the acute myocardial infarction. Of course, that condition had been known before Herrick's paper, but a great many people were still dying from acute indigestion because the syndrome had not before been so precisely spelled out.³

The incredible rush of knowledge about medical diagnosis and treatment threatens to leave us all in the lurch. In my own field, I can recall

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my father describing the great anticipation they had when thyroid extract was first isolated in the late '30's. They were excited because they felt they finally had a substance which would offer a chemical/pharmacological cure for mental illness. Patients given thyroid responded remarkably . . . And then, they came to realize that the effects did not last, and it was not, after all, the panacea for emotional illness.

It was only a bit more than a quarter century ago that psychopharmacological agents as we now know them were identified and developed in such profusion, following the serendipitous experience with chlorpromazine which was first introduced as an experimental antihistamine in the treatment of some emotionally ill patients in France. Now the minor and major tranquilizer medications, along with the anti-depressive drugs, top the lists of prescribed drugs in this country.

What does all this really mean? Placed in the context of history, it does prompt one to be humble. As George Santayana said, "We must respect the past, remembering that once it was all that was humanly possible." If we have come this far, how can we say we have come as far as we can go. Obviously, at some point we must expect diminishing returns, but who is to say when that will really happen?

MEDICINE AND PSYCHIATRY

The title of my remarks this evening suggests some thoughts about medical history which reflect my psychiatric orientation. We are reminded these days of the tenuous relationship between psychiatry and medicine, as if psychiatry is not really medicine. I recall the taunts during my straight medical internship about why I was not staying in a specialty where I was a REAL doctor. It is as if psychotherapy cannot really be a significant force in making ill people better; rather, there must be some tangible intervention — a pill, some electricity, some physical manipulation, etc.

Of course, I do not have any problem in this area, other than feeling a reasonable compulsion to still do an occasional physical examination and fulfill the traditional "doctor" role where it is appropriate to do so. To me, the marvelous feature of a psychiatric residency was that when it was completed, I finally felt

like a complete physician. In medical school, I learned how to treat the soma, to be a good physical physician; but there was a great lacking of appreciation for the psyche and its influence on the soma. Insofar as psychiatry deals with an appreciation for the emotional side of patients, it is critical to understanding the doctor-patient interaction. Indeed, I often think of psychiatry as the science of the art of medicine.

Of course, the gulf between psychiatry and medicine has deep and profound roots in our history. Psychiatry was a late development of medicine; the emotional illnesses were viewed as province of religion for 15 centuries after Christ. The symptoms of the mentally ill individual were beyond ordinary comprehension and prompted mystical and religious formulations; treatment was not a responsibility of physicians but of priests who invoked incantation, sacrifice, prayers and purification. With no reasonable explanation for abnormal thinking and behavior, symptoms could be explained only as an infestation by the devil or witches. The treatment placed the highest priority on the elimination of the evil forces at all costs.

The advent of the Renaissance led to advances in medical knowledge and an increasing sensitivity for the mentally ill. Franciscus Sylvius (1614-1672) was primarily an anatomist, but he advocated psychiatric treatment with drugs and moral persuasion. Asylums for the mentally ill were established — the first, Bethlehem in 1547, and two centuries later, St. Luke's in England, 1751, and the Pennsylvania Hospital in 1752. It was not until the end of the 18th century, however, that a significant enlightenment occurred in the attitudes toward the mentally ill — with Philippe Pinel's reform at the Bicetre in France, and William Tuke's establishment of a "retreat" in England, in which restraint was abandoned and occupational activities provided.

Yet, over the years, psychiatrists and psychiatry have remained somewhat alien to the mainstream of medicine. Indeed, that separation, marked by special, separate institutions, has only in the past decade seen significant erosion, with the decrease in state hospital beds and patients and the great increase in psychiatric units in general hospitals across the country.

In one other period of recent history, there was an integration of psychiatry with the other

specialities of medicine of considerable consequence — during World War II. Few people realize the extent of psychiatric casualties in that war — 20 percent — and the effective involvement of psychiatry in the front lines which helped return many of those individuals to their units, rather than losing them as productive soldiers.⁴ The upsurge in psychiatry after World War II was no accident. A great many young physicians in the military experienced a new relevance in psychiatry and thus sought formal training in that specialty upon their return home after the war.

As we think of developments in medicine and in psychiatry, one cannot help but be impressed by so much change. There is so much knowledge to be mastered — if one only thinks of the explosion of pharmaceutical agents at our disposal. Indeed, there are times when one may fondly wonder how much easier it might be if we did not have to keep up with so much change, so many new products, etc. I thought this just this week, when I was rewriting a hospital policy for the use of lithium carbonate in the treatment of manic-depressive patients, and had to carefully review the baseline clinical tests which were necessary before instituting that medication, along with the periodic follow-up tests which are critical, both to assure the effective blood levels of the drug and to determine any adverse effects on renal, hepatic, thyroid or cardiovascular function.

In the face of so much change, there is a critical element which should not be overlooked. We have seen incredible developments in technology in medical practice, and we have seen the character of illnesses change, such as the virtual elimination of infectious diseases as the cause of great mortality, and the increase in degenerative diseases and cancer as the life span has been increased; yet there is something which we can safely assume has not significantly changed throughout our recorded history of medicine: the basic psychological needs of our patients.

"CARING"—THE EVER-LASTING NEED

Five years ago, I participated in a symposium at the fall meeting of the Institute of Medicine, National Academy of Sciences. The topic of the two-day meeting was Health Care Quality, and I was asked to discuss "caring" as part of health care quality. The overwhelming focus of that meeting was on methods to assess

the quality of medicine through checks on new technology, to determine how much the specific tasks carried out in relation to a given patient are/were consistent with the latest scientific knowledge and understanding of the disease process and its treatment. There were occasional apologies for the omission of measuring in some way the "caring" aspect of treatment by getting feedback from patients. Indeed, the only direct discussion of this element of medical care was in my brief remarks.⁵

Yet, if there is anything constant in medicine which should be learned from the experience of practitioners who have preceded us, it is certainly in this area. We may easily forsake the blood-letting or other "primitive" therapeutic efforts of physicians of earlier ages, but I daresay we could profit much from emulating their bedside manner. After all, that was their greatest stock in trade.

It was in 1927 that Dr Francis Peabody wrote his classical dissertation on "The Care of the Patient."⁶ At that time, he observed:

The most common criticism made at present by older practitioners is that young graduates have been taught a great deal about the mechanism of disease, but little about the practice of medicine — or, to put it more bluntly, they are too "scientific" and do not know how to take care of the patient.

What was true in Dr Peabody's time was true in Hippocrates' time and is true today: one of the important emotional needs of our patients is caring. Illness may represent a search for care in some way—sometimes in almost a pathetic way, as in the case of a forlorn old man, displaced by a flood which had washed away his small shack and all his belongings, tentatively approaching the doctor at a first-aid station in the shelter for flood victims, asking for help for his bunions! His "illness" was a ticket of admission to the care giver, the physician.

Every illness has both physical and emotional components, although medical education and practice tend to focus on the physical. Every physical chief complaint is accompanied by a corresponding emotional chief complaint, and—as noted by Ivan Berlien — "The (emotional chief complaint) is often either not conscious in the patient or is not given because (of) social custom, cultural mores, or perhaps shyness."⁷

A patient's survival may be primarily a function of resolution of the physical chief complaint. Yet, it is equally likely that the quality of living may be as much or more a function of resolution of the patient's emotional chief complaint. The bleeding ulcer may be stayed, but the underlying, gnawing internal stress that makes life so uncomfortable may persist. One may treat the physical manifestations of thrombophlebitis with anticoagulation and surgery, but it is clear that the resolution of that illness may require more than just attention to the physical symptoms.

The role of the physician is one of a surrogate "care" giver. He is committed to attend the "dis-eased." He has the power not only to give attention and concern to ill persons, but also the capacity to excuse them from the performance of everyday duties and responsibilities. When we are ill, we are allowed to retreat from demands of our employer, family and friends. At the same time, many patients have ambivalent expectations when they seek medical care. The seeking and receiving of help is complicated at times by a sense of shame, inadequacy, failure, humiliation, resentment, worthlessness, and feeling "not OK." The physician must, thus, be equally sensitive to these feelings in order to fully address his patient's emotional needs.

We all know physicians who are absolutely superb technicians with all the latest knowledge and skill, but who approach patients in such a cold manner as to prompt doubt and distress. From my experience as a member of the county medical society Board of Censors, I am keenly aware that patients are often so unhappy with that kind of care that they file a formal grievance. In the investigation of such complaints, it becomes clear that the breakdown has been in the "caring" aspect of the doctor-patient relationship and not in the technical care and treatment provided.

In medical training, physicians are taught to maintain some emotional distance from their patients, to sense their experience empathically without becoming so involved sympathetically that the physician's rational and effec-

tive clinical judgment is impaired by his emotional involvement. Yet there is necessarily a degree of application of the Golden Rule of doing unto others as you would have them do unto you. Indeed, it may be advisable for every physician to periodically be a patient, to re-experience that role, and to be sensitized again to some of the forgotten aspects of that experience.

HEBREWS 13:8

Merill Eaton, professor of psychiatry at the University of Nebraska and a good friend, has often made reference to the traditional, flip progress note on the chart of the chronic mental patient: "Hebrews 13:8 — Jesus Christ — the same yesterday, today, and forever!" If one can pardon the sacrilegious connotation, there is a similar sense of unchangingness throughout the history of medicine in the doctor-patient relationship, a constancy of certain principles in that relationship.

As Dr Peabody summarized its essence:

The good physician knows his patients through and through, and his knowledge is bought dearly. Time, sympathy, and understanding must be lavishly dispensed, but the reward is to be found in the personal bond which forms the greatest satisfaction of the practice of medicine. One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient.⁶

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Menninger Foundation, P O Box 829, Topeka, Kansas 66601.

Hypertension Management

Two recent developments have given hypertension management a new significance as a public health issue in Oklahoma.

The first relates to the identification of better control of hypertension as one of the contributors to decreased cardiovascular renal death rates over the past decade. The second stems from recent research findings which indicate that effective therapy of mild to moderate blood pressure elevations has a significant impact on development of late complications.

Although hypertension screening referral and follow-up has been part of public health programs in Oklahoma for many years, increased emphasis has been given to this effort for the past three years.

Adolescent screening, initiated in 1977, has now been extended to 38 counties in which all senior high school students, faculty and school employees have been screened. Intensified screening activities among Blacks and Indians has been underway for the past nine months.

In mid-1980, four public health nurses were employed to give leadership to screening in four areas of the state. Contracts between the Oklahoma State Department of Health and city-county health departments in Tulsa and



News From The Oklahoma State Department of Health

Oklahoma City provide increased services in the two major metropolitan areas of the state. A contract with the Oklahoma affiliate of the American Heart Association is supporting statewide public and professional education programs.

For the patients who, once diagnosed and under treatment, may not follow their private physicians' orders, the department has initiated hypertension monitoring programs. These are located in 58 county health departments over the state. By contacting the health department, a physician may arrange to have his patient followed by a public health nurse who will perform blood pressure checks, review compliance with medications, provide dietary instruction, assist with weight control and provide other needed patient-education. Reports are made to the referring physician at regular intervals. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR AUGUST, 1980

DISEASE	August 1980	August 1979	July 1980	Total To Date	
				1980	1979
Amebiasis	7	—	6	33	10
Aseptic Meningitis	4	38	9	36	68
Brucellosis	2	3	—	4	5
Encephalitis, Infectious	—	5	2	6	18
Gonorrhea (Use Form ODH-228)	1227	1601	1366	9220	8918
Hepatitis A	21	25	38	263	157
Hepatitis B	22	24	21	136	82
Hepatitis Unspecified	24	23	15	183	122
Measles (Rubeola)	5	—	10	774	22
Meningococcal Infections	2	1	—	17	26
Pertussis	7	7	4	22	15
Rabies (animal)	19	23	13	187	197
Rocky Mountain Spotted Fever	16	6	18	55	44
Rubella	—	—	1	4	22
Rubella (congenital)	—	—	—	—	—
Salmonellosis	61	45	39	202	205
Shigellosis	37	36	31	156	140
Syphilis (Use Form ODH-228)	11	10	8	74	68
Tetanus	—	—	—	—	—
Tuberculosis	27	29	18	213	239
Tularemia	4	6	10	19	11
Typhoid Fever	2	—	—	3	—

Guest Lecturer Addresses Medical Ethics

A sixteen-year-old girl had suffered for three years from kidney failure. During that time she underwent hemodialysis and a kidney transplant. But even the transplanted kidney ceased to function and doctors doubted the success of another transplant. At this point the young girl and her parents requested no further hemodialysis. For a while doctors were able to convince the young girl and her parents to continue treatment despite its pain, but eventually the patient refused further treatment.

Advanced medical technology has achieved a tremendous amount of the success. But it has also created questions relating to medical ethics. Just where is that line dividing the medical professional's right to impose decisions to sustain life with medical technology and the patient's right to reject that advice? According to Edmund D. Pellegrino, MD, making good clinical decisions involves making good moral judgments.

Doctor Pellegrino, president of the Catholic University of America, Washington, DC, recently addressed teachers as well as medical and nursing students at the University of Oklahoma Health Sciences Center on the question of medical ethics.

A more detailed account of the case study cited earlier prefaced Dr Pellegrino's remarks. He used the study to illustrate an eight-step process for thinking through moral decision-making within the clinical context.

"Such steps help in making moral decisions and they are as intellectually important as clinical decision-making. A person must be a clear thinker in making good moral judgments," the doctor said.

Doctor Pellegrino said to analyze the patient's problem in order to determine the known facts as well as those areas that remain uncertain. After considering the available information, Dr Pellegrino says physicians should first make a medical judgment regarding treatment of the patient.

After this decision, the doctor recommends further analysis of the patient to determine his or her attitude toward the doctor's recommended treatment. The doctor says it is also important for physicians to discern the facts causing the patient's response to the doctor's approach to treatment. This constitutes the second step of the thinking process. Dr Pellegrino also recommends an analysis of the patient's background because he says the patient's response could be related to his or her ability or inability to make decisions and/or the patient's personal values.

After determining the facts behind the patient's response the third step of the thinking process penetrates the issue deeper. At this point, the doctor recommends that physicians pin down *particular values* related to the patient's response. The patient's attitudes toward life and health are examples of value-types Dr Pellegrino said should have been identified in the case of the sixteen-year-old girl. In addition, the doctor said such values should also be identified in the patient's family members and other involved persons. (Such values could include information about family and church relationships.) After uncovering these facts, Dr Pellegrino suggests that physicians examine them as they relate to the recommended approach to treatment of the patient.

The fourth step of the thinking process involves classifying the case into an ethical category based upon the information obtained from all involved persons. If all of the involved persons agree with the doctor's medical judgment toward treatment of the patient, the doctor could classify the ethics involved in the case as one of consent. However, if disagreement exists, Dr Pellegrino says physicians should classify the case according to whether the ethics of the case should be weighted toward the attitude of the patient or of the physician. After classifying the case according to its ethical value, Dr Pellegrino says physicians should reflect upon the particular point of the conflict if one exists.

The fifth step asks the physician to make a moral decision about the conflict. In other words, does the physician impose his decision on the patient or submit to the patient's request? Doctor Pellegrino cautions physicians to beware of any unconscious manipulation of the patient's decision if conflicting values are apparent.

The sixth step involves more concentrated reflection on the part of the physician toward his or her personal values relating to the suggested treatment. Doctor Pellegrino says physicians should ask themselves the following question while reflecting upon their values: "Does this decision accommodate a moral and ethical decision without compromising any principles related to my personal values?"

The next thought procedure warrants even more self-evaluation on the part of doctors. The physician is asked to reflect upon the fundamentals from which he or she based his or her medical judgment. This step is supposed to help the doctor gain a better understanding of what caused him or her to make this particular judgment. It should also help the physician in explaining the medical judgments to patients.

If the doctor is battling conflicting values regarding his or her medical judgment from the patient or other involved persons at this point in the case, Dr Pellegrino recommends that the doctor consider withdrawing from the case on the grounds of differences in moral principles.

The final step of the thinking process involves another decision about the doctor's original medical judgment. Some physicians will choose to change their mind after undergoing some deeper reflection into the matter.

Doctor Pellegrino says he does not believe all right decisions must coincide with one another. According, he would have respected the sixteen-year-old girl's request to end treatment. He says he believes strongly in respecting the patient's concept of what is good for them, provided they know all they need to know. □

New Treatment Relieves Skin Condition

Some American Indians inherit a painful and widespread skin problem caused from hypersensitivity to light. In a recent article in the *Journal of the American Medical Association* a report indicated the discovery of several effective treatments for this problem.

The condition is known by several names including hereditary polymorphic light eruption (HPLE). People having this skin problem are sensitive to a type of radiation from the sunlight which cannot be screened with the use of conventional suncreening products.

Symptoms of the problem usually appear during childhood with the development of crusty lesions on the face, hands and arms. Lips also become crusty and cracked. In adults the lesions spread to other exposed skin areas on the neck and chest.

In northern latitudes this skin problem begins in the spring, worsens through the summer and finally subsides in the fall.

Ramon M. Fusaro, MD, Creighton-Nebraska University Health Foundation, Omaha, Nebraska, has conducted a study of 46 patients who are members of the Red Lake Chippewa Indian Tribal Council, Minnesota. The physician experimented with the use of two skin creams and an oral medication. He treated them with an oral medication known as oral beta coaroten (trade names — Betacarotene and Solatene) and two skin applications called dehydroxyacetone (DHA) and lasone.

Treatment for most of the patients improved the skin problem significantly. Some required only the use of oral medication and others needed only skin applications. Several found relief after using the oral medication and skin cream simultaneously. □

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Forty-One Towns Receive Priority

The Physician Manpower Training Commission has classified forty-one Oklahoma communities as the state's highest priorities in having their physician needs fulfilled.

The commission recently released a report including brief descriptions of the priority-towns. Each of these communities has a population of less than 7,500.

Prospects who will receive the list of priority-towns to consider as practice opportunities are rural scholarship recipients who are obligated to practice in towns with populations under 7,500. This includes fourth-year students at the University of Oklahoma College of Medicine and the University of Oklahoma Tulsa Medical College, third-year students at the Oklahoma College of Osteopathic Medicine and Surgery, MD and DO primary care residents and interns, and all physicians who request a list of practice opportunities in the state.

Listed below are the forty-one priority-communities included in the commission's re-

port. For further information contact the following offices:

(1) Physician Manpower Training Commission, 405 271-5848

(2) Offices of Physician Placement: OU College of Medicine, Oklahoma City, 405 271-2049; OU Tulsa Medical College, Tulsa, 918 749-5531; Oklahoma College of Osteopathic Medicine & Surgery, Tulsa 918 582-1972

Northwest

Alva, Boise City, Canton, Pond Creek, Seiling, Shattuck, Texhoma, Thomas, Watonga, Waynoka

Northeast

Barnsdall, Blackwell, Choctaw, Henryetta, Jay, Kansas, Morris, Newkirk, Nowata, Okemah, Warner

Southwest

Burns Flat, Hollis, Mangum, Minco, Sayre

Southeast

Coalgate, Konawa, Idabel, Marietta, McCloud, Purcell, Stigler, Stratford, Sulphur, Talihina, Tishomingo, Wetumka, Wewoka, Wilburton, Wright City ☐

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Doctors Differ In Their Opinion On Teenage-Pregnancy Issue

Statistics clearly indicate a spiraling number of teenage pregnancies nationwide and in Oklahoma. The Oklahoma State Medical Association has adopted a resolution recommending steps toward alleviating the problem in Oklahoma. However, the resolution has caused controversy among some of the state's physicians. The following two articles present viewpoints from each side of this issue.

Pediatricians Seek Solution To Teenage Pregnancies

"None of the alternatives to an unwanted pregnancy are satisfactory," says Hal Vorse, MD, president of the Central Oklahoma Pediatric Society (COPS). For this reason pediatricians urged the Oklahoma State Medical Association (OSMA) to adopt a resolution emphasizing the prevention of pregnancy among teenagers. The OSMA approved such a resolution last May.

Nearly 10,000 teenagers give live births each year in Oklahoma according to a study conducted in 1978 by the Oklahoma State Department of Health. As startling as this may seem the facts become even more awesome after knowing other data derived from this study. It indicated that 31% of these girls are less than 15 years old. In addition, the rate of live births among teenagers in Oklahoma is increasing at a rate five times that of the national average. Unwanted pregnancies have become the leading health care problem among teenage girls in Oklahoma.

Doctor Vorse said most of the girls in the state are opting to raise their babies without the presence of their fathers. He explained that although the young girls may be physically capable of motherhood most of them are not equipped intellectually or emotionally for this responsibility. He says most teenagers have not found their own identity and because of this it's difficult for them to help another person develop.

According to the doctor, abortion is the number one form of birth control being used by teenagers. Accurate statistics are not available because state law does not require documentation of first abortions; however, it does require a record of subsequent abortions.

He also pointed out that only one percent of the unwed mothers are giving their babies up for adoption. He says this option is usually advantageous to the child.

Doctors Form to Counteract Resolution

A group of Oklahoma doctors have united to counteract purposes set forth in the OSMA resolution on the prevention of teenage pregnancy.

The resolution endorses legislation permitting physicians to prescribe contraceptives without parental consent.

Curtis Harris, MD, organizer of the group, says that by allowing physicians to issue contraceptives without parental consent, teenagers will be taught moral values deemed wrong by the group of doctors.

"It will teach them values such as hiding secrets from their parents and the use of contraceptives instead of abstinence," he said.

Although this practice could help reduce the number of teenage pregnancies, Dr Harris says, it ignores the need for communication between teenagers and their parents. He says the problem is much deeper than just reducing the number of pregnancies and saving tax dollars.

"It's much easier to prescribe contraceptives than to deal with the real issue which is to teach the value of lasting relationships," he said.

The doctor says he sympathizes with teenagers because they must grow up in a society with loosening values. He is concerned that younger generations seem to be losing respect for what he calls benevolent authorities. Consequently, he says, the stability of family units has weakened. However, Dr Harris says it is wrong to assume that all families and churches have failed in providing this type of guidance. He says family units remain the last hope in offering guidance to teenagers against the pressures of today's society. Doctor Harris says legislation permitting physicians to issue contraceptives to teenagers without parental consent will further destroy this hope within family units.

The 1978 study also reveals that 71.9% of the 15-17-year-old mothers receive assistance payments for 19 months after the birth of their baby. It further indicated that more than \$5,500 is spent by the state for the assistance of each unwed mother. On the other hand, statistics show that the state is spending only \$75 per girl to provide contraceptives.

The OSMA resolution supports adequate sex education in schools and legislation authorizing physicians to issue contraceptives to sexually active teenagers. Doctor Vorse has expressed his regret that the media have emphasized the legal aspects of the resolution.

"I am concerned that by providing contraceptives to girls others will misinterpret that to mean that some of us approve of sexual activity among adolescents — that's not true . . . We must simply treat the problem to prevent pregnancy. Prevention is better."

Doctor Vorse says the educational part of the resolution is probably the most significant and that doctors will have significant input within schools, churches and families.

The doctor blames the deterioration of the family unit within society as a primary reason for the unwanted pregnancy problem. He says homes, schools and churches have all failed to properly educate teenagers about the importance of conception within the framework of a family unit.

Doctor Vorse said the problem is community-wide and that solving it will entail the efforts of responsible members throughout the community including religious leaders, the media and concerned parents. He also stated, "I am proud of the Oklahoma State Medical Association for providing leadership in beginning to deal with the problem." □

Doctor Harris pointed out that most teenagers merely conceive that communication with their parents will be a problem. He cited a study conducted by Planned Parenthood involving 600 girls. Only one percent of the girls who asked permission from their parents for contraceptives were denied that request.

Doctor Harris also said that books and community programs are available to help interested parents and teenagers in understanding how to communicate better with one another.

In addition, the group of doctors consider the practice of prescribing contraceptives without parental consent to be medically unsound. He says teenagers do not have sufficient medical knowledge and for them to hide their use of such contraceptives could be hazardous.

Doctor Harris gave other reasons for opposing legislation permitting such practice. He noted the availability of over-the-counter contraceptives. He also cited a Planned Parenthood study indicating that a large number of girls in the study opted not to use prescribed contraceptives because they considered the use of these contraceptives to be unsafe.

The OSMA resolution also recommends that adequate sex education be taught in schools. Doctor Harris agrees that students should be instructed about anatomy, reproduction, sexual diseases, available contraceptives and their risks and benefits. But he says the form of sex education being taught in schools now goes beyond these boundaries by teaching values — values he says he would not want to influence his children.

Doctor Harris says he does not like being in opposition to the OSMA resolution and that he would be willing to support it if he thought it would solve instead of aggravate the problem.

1980 ANNUAL MEETING

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New York Physician Discusses Abortion With Oklahomans

Bernard Nathanson, MD, New York, became a national leader in the fight to legalize abortion less than a decade ago. Now he is battling against the practice of this procedure. During a recent presentation conducted in Oklahoma City, the physician discussed his involvement for and against abortion.

Doctor Nathanson had battled against New York's restrictive abortion laws and in 1968 he helped organize the nation's first political action group to fight such laws. Within two years the group succeeded in its effort to replace New York's restrictive law with legislation permitting abortion on demand.

According to Dr Nathanson, the media's tremendous publicity of the issue helped the group succeed. He said the group appealed especially to inexperienced, young women reporters because of the strong feminist movement during the period. The doctor said another factor was the group's immense bank of statistics which Dr Nathanson now claims to be 99% inaccurate.

"The end result — the fall of the law and an unprecedented number of girls flooding into New York for abortions . . . Oklahoma sent its share of pregnant girls," he said.

Doctor Nathanson's efforts favoring abortion did not end with the passage of permissive abortion laws. Eventually he became the director of the nation's first abortion clinic. He said he wanted to follow through on the issue to keep the abortion legislation from becoming an empty gesture. The operation became the largest abortion clinic in the world.

The fifth floor of what Dr Nathanson described as a filthy and dilapidated office building accommodated the earliest legal abortions. He said when he became director of the facility he worked to make it appear more like a medical operation where safe and humane abortions could be performed.

The clinic, staffed with 35 physicians, operated from 8:00 AM until midnight seven days a week. In less than two years Dr Nathanson said he retired from his position because of fatigue. But in those months approximately 60,000 abortions had been performed.

In addition to helping in the passage of legislation for abortion in New York and directing the nation's first abortion clinic, Dr Nathanson

submitted an article to *New England Journal of Medicine* in 1972 emphasizing strong support for abortion.

During the next several years Dr Nathanson became involved in the study of what he calls a revolutionary science—perinatology. Advanced technological developments had made possible the study of the fetus, a science that did not exist prior to 1970. Doctor Nathanson said he discovered life signs in the fetus as early as six weeks. He now believes such signs are prevalent in even younger fetuses.

In 1974 Dr Nathanson submitted another article to the *New England Journal of Medicine* because of his study of perinatology. It expressed his doubt for the first time toward his former position on abortion.

While studying this science Dr Nathanson said his respect for what he called his intra-uterine patient continued to grow and in 1977 he concluded that abortion is wrong. He said he decided that the fetus not only had to be "one of us" but that it also had to be protected.

"Human life of a special order is being taken in abortion and denial of this reality is moral evasiveness," he said.

Doctor Nathanson referred to the last seven years as a dark and bloody night in the fight against abortion. But he pointed out several recent judicial victories which he said have brought some hope. Among those victories was the Supreme Court's decision to uphold the Hyde Amendment, a proposal to end the use of federal funds for most abortions. Just as Dr Nathanson's earlier support for abortion had inspired him toward action, so is he now pursuing steps from the other side against abortion. The physician spends much of his time testifying in courtrooms across the country against the practice of abortion. His personal testimony and a book he wrote provided major evidence in influencing the Supreme Court's decision on the Hyde Amendment. This evidence was also a significant factor in the Supreme Court's decision to deny a rehearing in the case.

The doctor said one of his primary arguments against abortion is that it is medically unnecessary. He qualifies this statement by saying that abortion makes doctors an instrument of the patient's will and does not involve a decision from the doctor.

Doctor Nathanson urged the Oklahoma audience to challenge abortion clinics in court on the basis of certificate of need. He says some of

these clinics are operating illegally because they have not been licensed by a Health Systems Agency with a certificate of need. He further recommended that clinics having certificates of need be challenged for a rehearing. He also volunteered himself to testify at no expense to plaintiff or defendant. □

New Epilepsy Center Is Available in Oklahoma

Oklahoma's new epilepsy center offers assistance to Oklahoma physicians in the care of epilepsy patients says Billie D. Hudson, department director of the Mercy Epilepsy Center, Oklahoma City.

The facility opened in September as a private health care facility at Mercy Health Center. The quest for a facility of this kind in Oklahoma began nearly two years ago. Since that time an epilepsy center in Oregon, one of the nation's five regional centers, has assisted in the development of the Oklahoma facility.

Ms Hudson said the center was not established as an independent medical practice, but rather as a facility to assist Oklahoma physicians in caring for epilepsy patients who need more specialized care. Most of the clinic's patients currently have included referrals from physicians in smaller communities.

The director says treatment for epilepsy patients has changed within the last two years. These changes include improved drug therapy and new methods for monitoring anti-convulsant levels in patients. Both of these new treatment procedures are implemented at Mercy Epilepsy Center.

The center's treatment services are supplemented with educational services. It assists patients in helping them become better informed about their disorder. In addition, the center is targeting itself toward educating the public by conducting seminars for interested groups. Its first seminar will be held at Mercy Health Center on December 6. It will be designed for the state's school teachers and nurses. Eventually, the center's staff will offer seminars in other areas of Oklahoma.

Other services available at the center include social services and vocational rehabilitation.

The center is open all day each Wednesday. Its staff is comprised of Donald Landstrom, MD, medical director, Michael Goodrich, MD, assistant medical director, John Nelson, MD, neurological consultant, Billie Deane Hudson, department director and Mary Holmgren, RN, educator.

As the center continues to develop, Ms Hudson said its need for volunteers will also grow. She anticipates a need for individuals who will help transport epilepsy patients to the center.

For referral requests or clinic educational appointments contact the Mercy Epilepsy Center by calling 405 755-1515, extension 2654. □

Otolaryngologists Comment On a Name Change

More than 6,000 otolaryngologists are seeking a different name they say will provide a more comprehensible word to the public at large. In a recent report issued by the American Medical Association several otolaryngologists were cited for their comments about a possible name change.

One advocate of this change said that even sophisticated radio and television commentators are rarely able to pronounce otolaryngologist and that most of the time local and national newscasters butcher its pronunciation.

Another physician reported that most of the otolaryngologists who are members of the specialty society in his area favor a name change, but that no other name has been suggested that has received much support.

Other physicians disagree with the idea of changing the specialists' professional name because they say no other alternative could possibly be comprehensive enough to include the diverse groups of people now known as otolaryngologists and still be meaningful to the public.

Although the report did not indicate any alternatives for a new name that is being popularly supported, it did point out that a few of these physicians like to be known as ear, nose and throat men. □

Deaths

PAUL B. CHAMPLIN, MD
1896-1980

Oklahoma State Medical Association past-president, Paul B. Champlin, MD, died September 17, 1980. Doctor Champlin had served as OSMA president in 1947-48. A native of Canton, Kansas, he was graduated from Washington University School of Medicine in 1920. He practiced medicine in Enid from 1923 to 1978. He had been a member of the faculty at the University of Oklahoma Health Sciences Center. He was a member of the Southern Medical Society and the Oklahoma Radiological Society. He had served the Garfield County Medical Society as president in 1939 and 1943. In 1974 the OSMA honored Dr Champlin with a Life Membership.

I. F. STEPHENSON, MD
1906-1980

Retired, Alva general practitioner, I. F. Stephenson, MD, died September 7, 1980. Doctor Stephenson was a native of Klondike, Texas and was graduated from the University of Oklahoma College of Medicine in 1929. His practice was established in Alva in 1931. He was active in medical and civic affairs and was a charter member of the Southwestern Surgical Congress.

HENRY B. JENKINS MD
1895-1980

Henry B. Jenkins, MD, retired Chandler physician, died August 28. Born in Douglas County, Missouri, Doctor Jenkins was graduated from the University of Oklahoma College of Medicine in 1929. Following ten years with the US Naval Air Station in Dallas, he established his practice in Chandler. He had served with the armed forces in three wars—World War I, World War II and the Korean War.

EMORY E. BEECHWOOD, MD
1898-1980

Retired, Bartlesville general surgeon, Emory E. Beechwood, MD, died September 9. Doctor Beechwood was born in Kansas and was graduated from Creighton University School of Medicine in 1923. In 1926 he established his practice in Bartlesville. After nearly 50 years of practice, Dr Beechwood retired in the early 1970s. He was a Life Member of the Oklahoma State Medical Association.

MILTON J. SERWER, MD
1904-1980

Milton J. Serwer, MD, retired, Oklahoma City obstetrician and gynecologist, died August 28, 1980. Doctor Serwer was born in Detroit and was graduated from Rush Medical College in 1930. He came to Oklahoma City in 1933, where he was active in private practice until his retirement last year. He had been chairman and professor of the Department of Obstetrics and Gynecology at the University of Oklahoma Health Sciences Center. Doctor Serwer was a Life Member of the OSMA, a Fellow of the American College of Obstetrics and Gynecology and a member of the International College of Surgeons.

JOSEPH J. SWAN, MD
1912-1980

Joseph J. Swan, MD, Chickasha general practitioner, died August 25, 1980. Doctor Swan, who was born in Rogers, Arkansas, was graduated from the University of Oklahoma College of Medicine in 1939. His practice was established in Chickasha in 1945. He had served with the US Army during World War II. □

IN MEMORIAM

1979

<i>William K. Ishmael, MD</i>	<i>October 7</i>
<i>Ronald H. Bortz, MD</i>	<i>November 5</i>
<i>John E. Roberts, MD</i>	<i>November 8</i>
<i>Charles R. Rountree, MD</i>	<i>November 11</i>
<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>
<i>Charles H. Eads, MD</i>	<i>March 8</i>
<i>Ollie McBride, MD</i>	<i>March 10</i>
<i>Paul C. Gallaher, MD</i>	<i>April 20</i>
<i>Ennis M. Gullatt, MD</i>	<i>April 26</i>
<i>John E. Highland, MD</i>	<i>April 28</i>
<i>H. Violet Sturgeon Minton, MD</i>	<i>April 29</i>
<i>Elton W. LeHew, MD</i>	<i>May 3</i>
<i>C. W. Arrendell, MD</i>	<i>May 6</i>
<i>Edward A. Abernethy, MD</i>	<i>May 9</i>
<i>William F. Thomas, Jr., MD</i>	<i>May 17</i>
<i>Robert C. Lawson, MD</i>	<i>May 17</i>
<i>Robert L. Lembke, MD</i>	<i>June</i>
<i>Joseph Fulcher, MD</i>	<i>July 2</i>
<i>Emmett O. Martin, MD</i>	<i>July 15</i>
<i>James R. Colvert, MD</i>	<i>July 22</i>
<i>Thomas J. Hardman, MD</i>	<i>July 24</i>
<i>Kelly M. West, MD</i>	<i>July 28</i>
<i>Tom S. Gafford, MD</i>	<i>August 4</i>
<i>Joseph J. Swan, MD</i>	<i>August 25</i>
<i>Milton J. Serwer, MD</i>	<i>August 28</i>
<i>Henry B. Jenkins, MD</i>	<i>August 28</i>
<i>I. F. Stephenson, MD</i>	<i>September 7</i>
<i>Emory E. Beechwood, MD</i>	<i>September 9</i>
<i>Paul B. Champlin, MD</i>	<i>September 17</i>

CALENDAR OF EVENTS

December 8

American Association of Medical Assistants, 6:30 PM, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, Oklahoma.

December 13

Board of Trustees, Oklahoma Foundation for Peer Review, 1:00 PM, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, Oklahoma.

May 7-10, 1981

OSMA Annual Meeting, Shangri-La, Afton, Oklahoma.

Physicians are encouraged to use the OMSA Calendar of Events to list medically-related meetings or events that would be of interest to doctors throughout the state. Information for the calendar should be submitted two months in advance. Contact *The Journal*, Oklahoma State Medical Association, Oklahoma City, 405 843-9571. □

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The Editors and Staff
of The Journal and the
Oklahoma State Medical Association
extend to you and your loved ones
our best wishes for
A Joyous Holiday and
A Happy New Year.

This is the time of the year in which we reaffirm our goodwill toward all men. It is a fine tradition for us to once a year reaffirm and strengthen our goodwill, but in many ways we could and should demonstrate this spirit each and every day of our lives . . . especially in the way we treat our patients.



Persons of good conscience and goodwill inherently know what is right or wrong and what should be done and what should be avoided. These precepts are essentially ethical principles which are basic and fundamental. Our own professional ethics have recently undergone some minor revisions. They continue, however, to serve as a guide for proper care of the sick by "men of goodwill."

While many of you are familiar with the new Principles of Medical Ethics, you may not be familiar with the opinions and reports of the Judicial Council of the American Medical Association. They serve as additional guidelines to aid the ethical practitioner in determining how to handle specific problems.

For example, all of us face a question of how to handle unpaid charges. Should we or shouldn't we charge interest on the unpaid amount? If we choose to, are we violating an ethical principle or even a state law?

According to the Judicial Council, "It is not in the best interest of the public or the profession to charge interest on an unpaid bill or note, or to charge a penalty on these for professional services not paid within any prescribed period of time, or to charge a patient a flat collection fee if it becomes necessary to refer the account to an agency for collection. It is not improper, however, for a physician to add a service charge equal to the actual administrative cost of rebilling on accounts not paid within a reasonable time. The patient must be notified in advance of the existence of this practice."

Federal and state laws do not prohibit physicians from charging interest, although the Judicial Council suggests otherwise. They do,

however, require physicians who choose to do so to follow the Federal Truth and Lending Laws. Oklahoma physicians who choose to take part in this practice must file with the Oklahoma Department of Consumer Affairs and must follow strict disclosure laws. A great deal of time could be spent discussing this one issue. It is recommended that physicians who do not want to become involved in these problems do the following:

1. Do not charge interest.
2. Do not make a financial charge, service charge or collection charge.
3. Offer no cash discounts for more than five percent of the total bill.
4. Make no agreement for deferred payments and simply charge on a thirty-day basis. You may still allow patients to pay by installments, but do not *formally* agree to this arrangement.

Another opinion holds that the attending physician should complete the appropriate "simplified" Health Insurance Council form without charge. Similar forms should be handled similarly, although a charge for the more complex forms may be made in conformity with local customs. Obviously if a patient moves or simply changes physicians, patient records should be provided to the new physician on request. It is assumed, of course, that proper authorization to transfer these records has been granted by the patient.

As physicians we face unique situations almost every day. Our practices are affected not only by the ever changing technology of modern-day medicine but also by time-honored traditions. We are first a profession, but obviously we must also collect fees in order to maintain our practices. Often it is difficult to determine the proper mix of all of these factors. The Principles of Medical Ethics and the reports of the AMA Judicial Council can aid each of us in determining answers to these problems and in helping us express "goodwill" to our patients.

May this holiday season be a joyous one for you and may each of you retain the goodwill generated by this season throughout the year.

A handwritten signature in dark ink, appearing to read "Lloyd S. Miller, MD".

Diabetic Retinopathy: Hope for the Future

WAYNE F. MARCH, MD
BERNARD RABINOVITCH, PhD
MIKE ISSAC
ROBERT ADAMS

*New data demonstrate the feasibility
of a non-invasive glucose sensor for diabetes.*

Diabetic retinopathy is currently the leading cause of blindness in the working population of the United States and is the second most common cause of legal blindness (senile macular degeneration is the most common cause of legal blindness). The National Diabetic Retinopathy Study¹ including more than 1700 patients showed conclusively that laser ablative therapy is indicated for (1) neovascularization of the optic nervehead covering more than one-fourth of the optic nervehead, (2) vitreal hemorrhage of any sort, (3) extensive neovascularization. Neovascularization of the optic disc is shown in Figure 1. In the randomly selected group who were not treated with laser, neovascularization increased in 44% of cases.

In those treated with laser, neovascularization increased in only 23%. Present laser therapy for these three indications include not only focal treatment of neovascularization but so-called "ablative" treatment. The principle of ablative treatment is to place 3000 laser spots in the retina from the posterior pole to the far periphery. This type of treatment eliminates areas of ischemic retina which are presumably producing an angiogenesis factor that causes the ingrowth of new vessels. These new vessels are fragile and when pulled by the vitreous cause bleeding into the vitreous which causes blindness when the vitreous clot organizes and

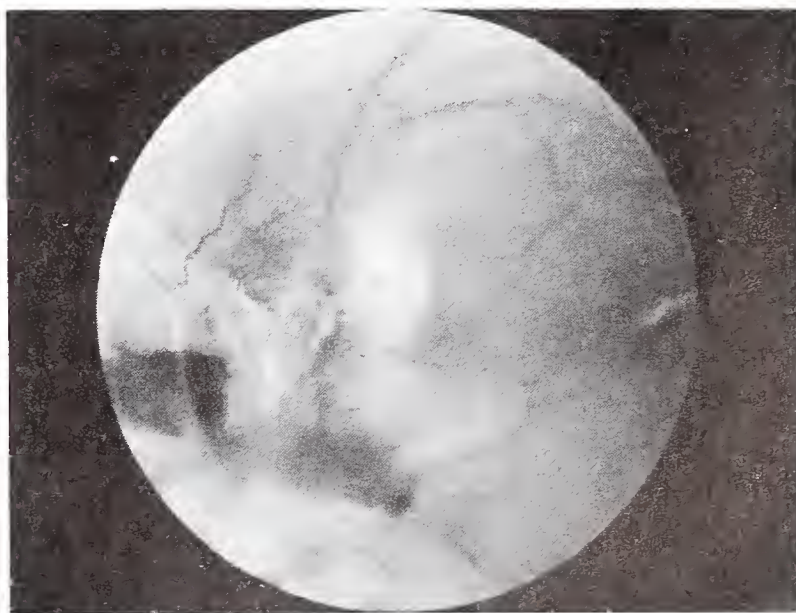


Figure 1 — Neovascularization of the optic nerve requiring laser ablative therapy.

From the Dean A. McGee Eye Institute, Department of Ophthalmology, University of Oklahoma.

pulls off the retina. The newer treatment, therefore, not only cauterizes new vessels before they bleed but postpones the growth of further neovascularization because the ischemic stimulus is reduced.

More and more evidence has been compiled showing that if the blood glucose in the diabetic can be normalized diabetic retinopathy and most of the microvascular complications of diabetes are vastly reduced. Although implantation of a mechanical pancreas and/or successful transplantation of islet tissue may remain long-range goals for improving the management of diabetes, the development of a practical non-invasive means for monitoring blood glucose levels might be expected to provide much of the potential benefit of these methods with substantially fewer hazards. The concentrations of glucose in the aqueous humor of the eye is known to vary with blood glucose concentration in normal and diabetic humans.² The purpose of the present study is to determine whether the optical rotation of the aqueous humor is a sufficient indication of glucose concentration in the aqueous humor and a satisfactory estimate of blood glucose concentration.

METHODS

The aqueous humor was withdrawn from rabbit eyes and its optical rotation was compared with glucose concentration, and with the glucose concentration of ear-vein blood. The rabbit study comprised three groups: group 1 was made hypoglycemic by administration of insulin (soluble crystalline zinc insulin 15 units per kg body weight, given subcutaneously); group 2 was mildly hyperglycemic (10 to 20 ml of 50% glucose was deposited in the stomach); group 3 was made severely hyperglycemic (20% glucose was infused intravenously). One hundred microliters of aqueous was removed from each eye by paracentesis, and the samples from a given group were pooled for polarimetry. Absolute optical rotation of the aqueous was measured using a polarimeter at the National Bureau of Standards and a cell having a pathlength of 0.94 cm, a pathlength equal to or less than that expected in the human eye. Glucose assays were performed by glucose oxidase colorimetric microanalysis.

The concentration of glucose in aqueous humor was found to be lower than, but nevertheless proportional to, blood glucose levels as shown in Table I.

TABLE I
BLOOD AND AQUEOUS HUMOR
GLUCOSE CONCENTRATION

	Aqueous Rotation	Humor Glucose (mg%)	Blood Glucose (mg%)
Group 1	2"	28	47
Group 2	18"	177	240
Group 3	76"	604	715

Based on handbook values for the specific rotation of glucose at 546.0 nm (the wavelength of the above assay), glucose found in the aqueous humor can account theoretically for optical rotation of 2.9" (group 1), 18.6" (group 2), and 62.3" (group 3). Thus, in hypoglycemia, or mild hyperglycemia at least, net changes in optical rotation seem attributable entirely to changes in glucose concentration.

Wayne F. March, MD, was graduated from Northwestern University Medical School and is certified by the American Board of Ophthalmology. He is associate professor and vice-chairman of the Department of Ophthalmology at the University of Oklahoma Health Sciences Center. He is a member of the American Academy of Ophthalmology and the Association for Research in Vision.

Bernard Rabinovitch, PhD, was graduated from Cambridge University, and is presently professor of ophthalmology at the University of Oklahoma Health Sciences Center. Doctor Rabinovitch is a member of the American Society for the Advancement of Science, the American Chemical Society and the New York Academy of Sciences.

Michael S. Isaac holds a BS degree from Oklahoma City University and provided technical assistance on this project.

Robert Adams holds a BS degree from Central State University and spent two years in the USAF Electronic School. He is a member of the American Chemical Society.

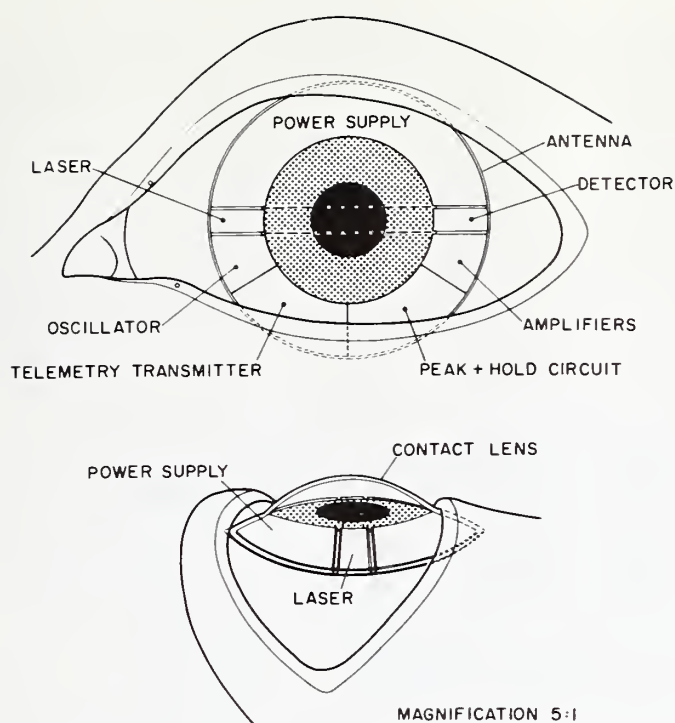


Figure 2 — Concept of a contact lens non-invasive glucose sensor.

DISCUSSION

This preliminary feasibility study has shown that the optical rotation of the aqueous humor effectively indicates aqueous humor glucose concentration in the range of hypo- and moderately hyperglycemic conditions. Other data, currently in preparation, show that it is possible to shine a light beam across the anterior chamber parallel to the iris and to use that light beam to monitor aqueous humor glucose concentration. These preliminary data have resulted in a concept for a non-invasive glucose sensor.³ Figure 2 illustrates this final concept

of a contact lens with self-contained microminiature components necessary to determine glucose concentration and send out a telemetry signal to a pocket receiver or an implantable insulin pump.⁴

SUMMARY

The National Diabetic Study has proven conclusively that argon laser ablative treatment is mandatory for diabetics with severe proliferative diabetic retinopathy. A great deal of data have been previously compiled which show that strict control of the blood glucose can reduce the microvascular effects of diabetes including diabetic retinopathy. Data are presented which show that optical rotation measurements in the aqueous humor give a good indication of glucose concentration in the aqueous humor and support a proposal for a non-invasive glucose sensor.

ACKNOWLEDGEMENTS

This research was supported by the Dean A. McGee Research Fund, The National Society to Prevent Blindness, and the Western Oklahoma Chapter of the American Diabetes Association.

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Wayne F. March, MD, 608 Stanton Young Drive, Oklahoma City, Oklahoma 73104.

The Use of Povidone Iodine in the Treatment of Burns

A Literature Review

ROBERT C. TOMMEY, MD
H. P. NORBERG, MD
JAMES M. GUERNSEY, MD

Drawbacks of using Povidone Iodine in the treatment of burns are outlined.

The use of Povidone iodine (Betadine) in the treatment of burns is both common and controversial. The purpose of this paper is to use the literature review in an attempt to document the role and effectiveness of Betadine as a burn surface therapeutic agent.

Povidone iodine is a complex Polyvinylpyrrolidone (PVP) and iodine. Iodine is unstable and insoluble in water and therefore, for clinical use, the solubility has been attained by using alcohol and salts of iodine.⁶ These compounds are irritating to skin and cause local reactions of varying severity, but have been used topically for many years to decrease wound infections caused by bacteria, fungi, and even viruses.^{6, 15} PVP is a water soluble polymer of high molecular weight which is

non-toxic, non-sensitizing to tissues and is used as a suspension agent for iodine. PVP does not interfere with wound healing and has no antimicrobial effect.⁶ When iodine and PVP are combined, iodine vapor pressure is reduced to near zero and iodine becomes water soluble.³ Free iodine is released at a slow rate from this complex prolonging the antimicrobial actions of available iodine.³ Povidone iodine is available as an aerosol spray with 0.5% available iodine, as a surgical scrub with 0.75% available iodine and as a liquid antiseptic with 1% available iodine.

The prevention of burn-wound sepsis is dependent on keeping the concentration of bacteria in the wound below 10^5 per gram of tissue.^{2, 8, 14} The objective evaluation of the effectiveness of surface antimicrobial agents requires that these substances be capable of achieving this goal while not causing excessive toxicity.

The antimicrobial activity of Betadine has been clearly established. Connell and Rousset demonstrated that all bacteria studied, including antibiotic resistant groups, were killed.³ This occurred after a contact time of 15 seconds and lasted up to four hours with 1:2000 dilutions of standard Betadine. However, its effectiveness is directly related to frequency of application, size of burn, length of time from burn to application and the method of applica-

tion. Betadine is also effective against fungi when it is applied to the burn-wound four times a day.^{7, 8}

In order to be effective, Betadine must be applied to the burn-wound before such a wound has been colonized above 10^5 organisms per gram of tissue. Animal models clearly demonstrate that once colonization above that concentration has occurred, Betadine is not effective.^{9, 13} These studies have been correlated with clinical experience with the conclusion that Betadine is not effective in the treatment of burns older than twelve hours at first application, heavily contaminated burns, or wounds that are infected.¹³

The effectiveness of Betadine in preventing burn-wound sepsis is highly dependent on the frequency of application and the contact of this agent with the clean burn-wound. Studies with small burns using Betadine aerosol spray twice a day report satisfactory wound healing and decreased number of positive quantitative cultures.^{3, 6, 15} Copeland⁴ treated 30 patients with single daily application of Betadine and found this to be adequate in the treatment of

small, superficial burns but not effective in the treatment of extensive third degree burns. Georgiade and Harris⁷ compared several frequencies of applications of Betadine. Those wounds in which it was applied every other day delivered 34% cultures greater than 10^5 colonies per cm^2 of tissue. Daily application resulted in 14% 10^5 colonies per cm^2 of tissue and when applied four times a day in 2% wounds delivering above 10^5 colonies per cm^2 . Copeland and Macedonia⁵ confirmed this finding in other studies. Georgiade and Harris⁸ directly correlated colony counts with frequency applications. More than 25% of cultures in patients with the applications less than four times a day had pseudomonas growths greater than the critical level of 10^5 per cm^2 of tissue. Four-times-a-day application reduced positive quantitative cultures to 8% of patients. In rats, Robson and Krizek¹³ using virulent pseudomonas inoculation of burns found four-times-a-day application of Betadine was sufficient to keep bacterial levels less than 10^5 per gram of tissue. When the open, closed or modified-closed methods of dressing the burn were compared, the results were identical as long as the wound itself was saturated with Betadine four times a day.^{7, 8}

Robert Tommey, MD, was graduated from the University of Arkansas School of Medicine in 1976 and is presently taking his fourth-year postgraduate work.

A 1969 graduate of the University of Oklahoma College of Medicine, H. P. Norberg, MD, has been certified by the American Board of General Surgery and Plastic Surgery. He is associate professor of the Department of Surgery at the University of Oklahoma Tulsa Medical College and a member of the Alpha Omega Alpha and the American Association for the Advancement of Science.

James M. Guernsey, MD, was graduated from Stanford University School of Medicine in 1960 and is certified by the American Board of General Surgery and Thoracic Surgery. He is professor and chairman of the Department of Surgery at the University of Oklahoma Tulsa Medical College. Among his medical affiliations are the Association for Academic Surgeons, the American Association for Thoracic Surgery, the American Association for the Surgery of Trauma and the Southwestern Surgical Society.

Early experience with Betadine as a burn wound topical agent indicated that it is relatively nontoxic with occasional allergic response of skin rash noted.^{1, 10, 11} However, when used in large burns, alterations in T3 and T4 do occur and extremely high serum levels of iodine have been found.^{1, 10, 12} Pietch and Mekins¹² reported two patients with metabolic acidosis and renal changes of iodine toxicity, one of whom died. This type of toxicity is dose-related and therefore, will be much more common in patients with large burn areas and with full thickness burns.

In conclusion, it appears that Betadine is a useful and effective agent in burn therapy. In the early treatment of small burns, Betadine is very effective. Its use twice daily seems adequate under these conditions. In the treatment of large burns or burns already heavily colonized, Betadine should not be considered a first-line topical agent. It seems more prudent to follow burn-wound bacteria colonization with quantitative cultures, preferably by a biopsy of the wound itself in all major burns at frequent intervals. If bacteria levels rise above 10^5 colonies per gram of tissue then either a short trial of increased frequency of Betadine

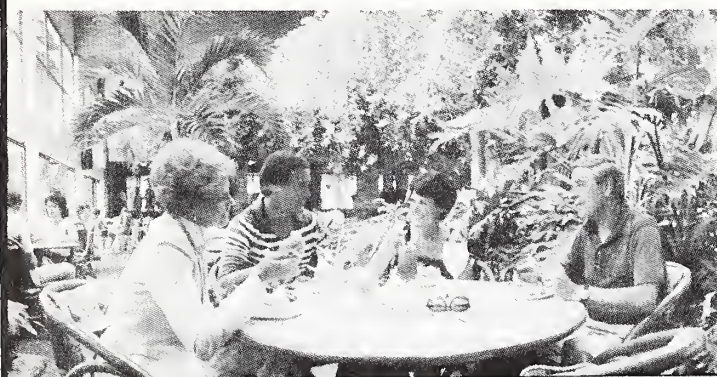
application should be started or a change in topical agents instituted.

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1981 OSMA ANNUAL MEETING



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Seminar On Antibiotics V

Aminoglycosidic Aminocyclitols

EVERETT R. RHOADES, MD

Aminoglycosides are especially valuable in the treatment of Gram-negative rod infections. The limiting factor in their use is toxicity.

BACKGROUND

In January 1944, Schatz, Bugie and Waksman reported the discovery of streptomycin, the first antibiotic found to be effective against a variety of Gram-negative bacilli and, just as importantly, tuberculosis. By 1960, neomycin and kanamycin were available and these three antibiotics were classified as "antibiotics derivable from sugars." Subsequently, they became known as "aminoglycosides" because they contained amino-sugars attached to a moiety by glycosidic linkage. The term "aminoglycoside" is not specific and a number of other unrelated antibiotics such as erythromycin and polymyxin are also kinds of aminoglycosides since they contain amino-sugars with glycosidic linkages. It is more appropriate to identify the antibiotics under

present discussion as "aminoglycosidic aminocyclitols." However, common usage gives the term "aminoglycoside" precedence.

The central structure of these antibiotics derives from inositol, a six carbon ring with hydroxyl substitutions at each of the six points. Any of these hydroxyl points may be substituted upon through glycosidic linkages, forming a variety of aminoglycosides. The central structure for streptomycin is streptidine whereas the other antibiotics are built around 2-deoxystreptamine. Newer examples of aminoglycosidic aminocyclitols include gentamicin, tobramycin, and amikacin. Sisomicin and netilmicin are not yet marketed in the US. (Table 1)

Table 1
AMINOGLYCOSIDES

Drug	Trade Name	Year Discovered Or Introduced
Streptomycin	Streptomycin	1944
Neomycin	Mycifradin (Upjohn)	1949
Paromycin	Humatin (Parke-Davis)	1959
Kanamycin	Kantrex (Bristol)	1957
Amikacin	Amikin (Bristol)	1973
Tobramycin	Nebcin (Lilly)	1971
Gentamicin	Garamycin (Schering)	1964
Sisomicin		1973
Netilmicin		

MECHANISM OF ACTION

Aminoglycosides kill bacteria outright (and hence are "bactericidal") although the actual mechanism of killing is not known. Most studies of the mechanism of action of aminoglycosides are of streptomycin which binds irreversibly to the 30-S fraction of the ribosome where it causes misreading of the genetic information contained in messenger RNA and produces "nonsense" proteins. However, this does not in itself result in death of the cell. Aminoglycosides also damage cell membranes and this effect may actually be more immediately destructive to bacterial cells.

The attachment and entrance of aminoglycoside antibiotics into bacteria is an active process requiring oxygen. Thus, they are not effective under anaerobic conditions. Certain organisms seem to be relatively impermeable to aminoglycosides even under normal circumstances and this may explain some of the resistance of certain organisms such as pseudomonas and streptococci. In the latter instance, the impermeability may be overcome by the addition of penicillin which damages the bacterial cell wall, and serves as a mechanism for the synergistic activity between penicillin and aminoglycosides upon Gram-positive cocci.

BACTERIAL RESISTANCE

There are three ways in which organisms may be resistant to aminoglycosides:

1. Resistance to uptake or penetration of antibiotic into bacterial cells, as mentioned above.
2. A chromosomally-mediated resistance of the ribosomes to the attachment of these agents. *E. coli* resistant to streptomycin has been described in which organisms seem to

modify the 30-S fraction of the ribosome to block the attachment of streptomycin. Mutants possessing this ability have been produced in vitro. The clinical significance of this mechanism is not yet clear.

3. Plasmid-mediated enzymatic inactivation. In this instance the organism elaborates an enzyme which degrades the antibiotic. There are three enzymes which are most important in inactivating aminoglycosides; an acetylase, an adenylcyclase, and a phosphorylase. Aminoglycosides vary in the number of sites that can be attacked by these bacterial enzymes. At present, amikacin seems to be more resistant to this enzymatic degradation than the other aminoglycosides. Keeping in mind the great versatility of microorganisms, one might not be surprised to find the future development of new enzymes capable of destroying aminoglycosides in different ways.

ANTIBACTERIAL SPECTRUM AND
CLINICAL USE

The aminoglycosides are ineffective under anaerobic conditions and against anaerobes. Their activity is not great against Gram-positive cocci although there has been considerable emphasis on the fact that most staphylococci are susceptible. Extensive clinical studies demonstrating the effectiveness of aminoglycosides alone in treating staphylococcal infections are lacking.

The greatest usefulness of aminoglycosides is in treating infections caused by aerobic Gram-negative rods, with the exception of salmonella and shigella (see Table 2 for the clinical indications for aminoglycosides). Indeed there are no antibiotics that are superior

Table 2
Aminoglycosides (Parenteral)
Indications For Use

- I. Established infection with Gram-negative bacilli
 - A. Especially enterobacteriaceae (ie *E. coli*, *klebsiella*, *enterobacter*, *serratia*, *proteus* and *providencia*) except salmonella and shigella.
 - B. *Pseudomonas*
- II. Suspected life-threatening infections where Gram-negative bacilli are probable pathogens.
 - A. Especially in suspected Gram-negative sepsis.
- III. Certain local infections where specific organisms suspected; may need to administer locally.
 - A. ie, joint space, bone, CNS, pericardium etc.
- IV. Gram-Positive organisms
 - Rarely use alone
 - May combine with penicillin or cephalosporin in special cases (ie, enterococcus or staphylococcus)

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Table 3
Examples of Improper Aminoglycoside Use

1. Soft tissue infections acquired in the community in a healthy host (ie, trauma to extremities).
2. Using full dosage in an elderly patient or a patient with decreased renal function.
3. Use for longer than a week without monitoring for nephrotoxicity (serum creatinine).
4. Treatment of uncomplicated urinary tract infections in which another antibiotic may be equally effective.
5. Systemic administration for meningitis.

in this respect. However, pseudomonas and certain strains of serratia and providencia are frequently resistant to the aminoglycosides. Examples of improper aminoglycoside use are shown in Table 3.

PHARMACOLOGY OF AMINOGLYCOSIDES

All aminoglycosides are poorly absorbed. The daily parenteral dose should be administered at 6-12 hour intervals unless renal insufficiency is present, in which case either the dose should be decreased or the interval increased. They should not be given by IV push. Occasionally the blood level of gentamicin, and perhaps some of the other aminoglycosides, is unaccountably low. Monitoring of blood levels is thus mandatory in the severely ill, and in those with renal dysfunction. Amikacin appears to have a much more consistent absorption than does gentamicin. With gentamicin and tobramycin one desires a peak concentration of 8010 mcg/ml and a trough concentration of 2 mcg/ml. The respective values for amikacin are 30 mcg/ml and 10 mcg/ml.

A number of formulae have been devised for altering the regimen in renal failure. Theoretically, varying the dose will result in less dras-

tic changes in serum concentrations. A number of nomograms are available for alteration of the regimen. Even in renal failure the initial day's dose may be given. The only reliable way to gauge aminoglycoside therapy is by assay of the drug which should be readily available in most hospitals. Aminoglycoside effect is severely retarded at low pH and in purulent material, and conversely is greatly increased in an alkaline medium.

Aminoglycosides may under certain conditions be antagonized by antibiotics such as carbenicillin, clindamycin, and chloramphenicol, and in vitro may be inactivated by penicillins or cephalosporins. A summary of pharmacologic features is shown in Table 4.

CLINICAL DIFFERENCES BETWEEN AMINOGLYCOSIDES

Long clinical experience suggests that streptomycin be employed in the treatment of plague, tularemia, and brucellosis. Other aminoglycosides should be effective but clinical studies are lacking. Kanamycin remains the most commonly employed for preoperative bowel preparation, and is given orally for this. Organisms resistant to tobramycin are usually resistant to gentamicin (and to a large extent vice versa). Organisms resistant to amikacin but susceptible to gentamicin or tobramycin are exceedingly rare. In hospitals where considerable resistance has been shown against gentamicin and tobramycin, amakacin may be the drug of choice for initial therapy, especially in the patient with life-threatening illness.

Tobramycin appears to be somewhat less nephrotoxic than gentamicin but the clinical significance of this is not entirely clear. Likewise, tobramycin is somewhat more effec-

Table 4
AMINOGLYCOSIDIC AMINOCYCLITOLS
Summary of Pharmacologic Activity

Drug	Route of Adminis- ration	Adult dose per day* mgm/kgm	Unit Dose* mgm/kgm	Usual Interval* Between Doses	Peak Serum level after IM Dose mcg/ml	Toxic Serum level
Streptomycin	IM	15-25	7.5	12 hr.	18	40
Kanamycin	IM & PO**	15	7.5	12 hr.	18-22	40-45
Gentamicin	IM, IV	3-5	1.5	8 hr.	4-8	12-15
Tobramycin	IM, IV	3-5	1.5	8 hr.	4-8	12-15
Amikacin	IM, IV	15	7.5	12 hr.	18-20	40-45
Sisomicin	IM	3-5	1.3	8 hr.	4-8	?
Netilmicin	IM	7.5	2.5	8 hr.	6-12	?

*With normal renal function

**Dose different than for IM, used for preoperative "bowel preparation."

Antibiotics / RHOADES

tive in vitro against *Pseudomonas* than is gentamicin.

TOXICITY

All of the aminoglycosides possess considerable toxicity. The most important is impairment of renal tubular function. This may be reversible with discontinuation of the drug or it may lead to permanent renal failure.

Ototoxicity may be either vestibular or auditory in nature. All aminoglycosides accumulate in inner ear fluids. Some are more likely to damage the vestibular and others are more likely to damage the auditory components. Ototoxicity depends upon the blood level of the drug and is more likely to occur in the elderly

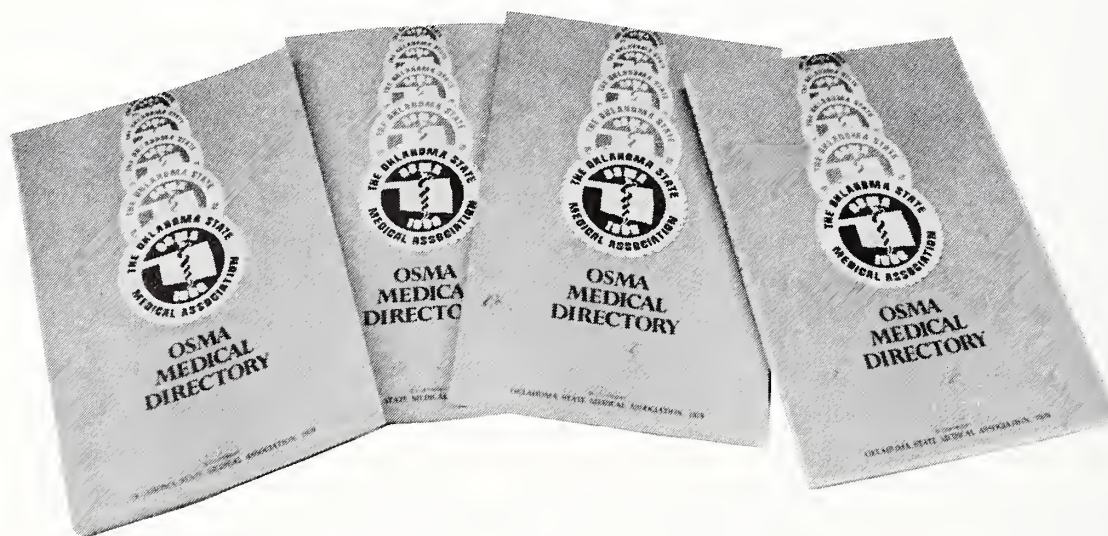
and in the presence of renal failure. Concomitant diuretic therapy presents an added hazard. The ototoxicity may reverse somewhat when therapy is discontinued, but when hair cells are destroyed there may be additive effects with subsequent courses.

These antibiotics potentiate the actions of curare-like drugs. This effect is dose related, and may be treated by anticholinestrases and calcium salts.

SUMMARY STATEMENT

Aminoglycosides are especially valuable in the treatment of Gram-negative rod infections. The limiting factor in their use is toxicity.

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News From The Oklahoma State Department of Health

The State Board of Health at its meeting on September 13, 1980, endorsed changing the recommended five-doses poliomyelitis immunization schedule to a four-dose schedule. This action brings Oklahoma recommendations and requirements in line with those of the American Academy of Pediatrics and the US Public Health Service Advisory Committee on Immunization Practices.

Two years ago because of the possible threat of poliomyelitis being introduced into Oklahoma from Mexico, a decision was made to use a five-dose schedule. Since there is little evidence of increased vulnerability to a poliomyelitis outbreak from this source, and since physicians of the state have been concerned about the inconsistency between state recommendations and those of national organizations, this change was indicated.

The new approved schedule is as follows:

2 monthsDPT and Polio

4 monthsDPT and Polio
6 monthsDPT
18 monthsDPT and Polio
4-6 yearsDPT and Polio

The polio immunization at six months is no longer recommended, but it is optional if private physicians wish to suggest it.

For children who have started the series and received the two, four and six months immunizations, the final immunization can be given at either 18 months or during the four-to-six-year-age period. While there are no firm guidelines on this issue, the Center for Disease Control favors giving the final dose at or near the entry into school since it is viewed as a booster.

Specific questions about this and other immunizations should be directed to the Immunization Division, Oklahoma State Department of Health, P.O. Box 53551, Oklahoma City, 73152, 405 271-4073. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR SEPTEMBER, 1980

DISEASE	September 1980	September 1979	August 1980	Total To Date	
				1980	1979
Amebiasis	5	6	7	38	16
Aseptic Meningitis	4	24	4	40	92
Brucellosis	3	—	2	7	5
Encephalitis, Infectious	—	—	—	6	18
Gonorrhea (Use Form ODH-228)	1232	1305	1227	10452	10223
Hepatitis A	27	37	21	290	194
Hepatitis B	21	21	22	157	103
Hepatitis Unspecified	16	22	24	199	144
Measles (Rubeola)	—	—	5	774	22
Meningococcal Infections	—	4	2	17	30
Pertussis	1	5	7	23	20
Rabies (animal)	9	24	19	196	221
Rocky Mountain Spotted Fever	3	7	16	58	51
Rubella	1	—	—	5	22
Rubella (congenital)	—	—	—	—	—
Salmonellosis	48	68	61	250	273
Shigellosis	30	33	37	186	173
Syphilis (Use Form ODH-228)	13	7	11	87	75
Tetanus	1	—	—	1	—
Tuberculosis	37	35	27	250	274
Tularemia	1	2	4	19	13
Typhoid Fever	1	—	2	4	—

OSMA To Hold First Leadership Conference

National, state and local leaders will address the first leadership conference of the Oklahoma State Medical Association to be held February 27 - March 1, in Oklahoma City.

The conference sessions will help to further inform any interested physician or auxiliary member on primary areas often confronting physician-leaders of medical associations.

Ed Kelsay, OSMA legal counsel said that several physician-leaders in Oklahoma had requested that a seminar of this kind be conducted. Kelsay added that many other state medical associations sponsor similar programs on an annual basis for their incoming leaders.

James S. Todd, MD, member of the Board of Trustees of the American Medical Association will address the conference during one of its three general sessions. Doctor Todd was chairman of the AMA Ad Hoc Committee to Review the Principles of Medical Ethics during its two-year deliberations. In addition, Dr Todd has served in other AMA leadership positions, as well as for his own state medical association.

Two other national spokesmen will deliver a presentation on the ins and outs of handling media confrontations. They are Mort Enright, director of the American Medical Association's Speakers and Leadership programs and T. Stephen May, associate professor of the radio-television-film department, Northwestern University, Evanston, Illinois. According to an *AMA News* publication, the spokesmen have co-instructed approximately 8,000 physician-leaders on how to deliver public speeches and how to handle the news media.

Frosty Troy, a long-time political writer in Oklahoma, will also speak during the OSMA leadership conference. He is the editor of *The Oklahoma Observer*, a publication he founded during the early 1970's.

In addition, the conference will include several workshops. OSMA staff, local physicians and other professionals will conduct these ses-



James S. Todd, MD

sions. The content of the workshops will involve a detailed explanation of the organization and structure of organized medicine; procedures to utilize in conducting meetings; the history and background of PLICO's (OSMA's newly formed physician liability insurance company) formation and an explanation of the various classes of the insurance program. Additionally, there will be discussion on other OSMA-sponsored insurance programs; how to handle problem-physicians including doctors who are mentally or physically impaired because of age, drug or alcohol abuse or overwork; pointers on dealing with Oklahoma's news media; and methods for resolving interpersonal conflicts within special groups, boards and hospital staffs. □

Subcommittee Revises Peer Review Guidelines

A subcommittee of the OSMA Council on Members Services has revised guidelines for OSMA's peer review committee.

More than one year ago the OSMA Board of Trustees voted to suspend the association's peer review committee. This action was taken

because the Federal Trade Commission had charged peer review committees of state medical associations with price-fixing. Other state medical associations have taken even stricter action by permanently terminating the committees in order to prevent potential law suits.

Guidelines for OSMA's peer review committee have been revised in an effort to re-activate the group. The primary revision restricts the committee from reviewing any fee disputes.

Under the revised guidelines the committee will continue to review cases involving all aspects of appropriateness and/or quality of medical care rendered by medical doctors in Oklahoma who are members of OSMA or who have their liability coverage through OSMA's professional liability insurance program.

The guidelines specify conditions which must be met before a case can be submitted to the association. Those who can submit a case to the committee include patients, third party carriers and physicians. In addition, the revised guidelines outline the group's process of review.

The guidelines also point out the peer review committee's obligation to file charges with the association's grievance committee or the Board of Censors of the appropriate county medical society if disciplinary action is needed. This obligation stems from the commitment of OSMA and all of its councils to abide by the principles of medical ethics adopted by the House of Delegates.

The peer review guidelines have been reviewed by the Council on Members Services and by the OSMA Board of Trustees since the publication of this article. Action taken by these groups on this matter will be described in greater detail in an article to be published in a later issue of The Journal of the Oklahoma State Medical Association. □

Various Speakers to Address OSMA Scientific Program

Three out-of-state physicians and some Oklahoma doctors will address scientific session audiences at the Oklahoma State Medical Association Annual Meeting. This year, presentations for the scientific program will feature various clinical crisis situations. OSMA's annual meeting will be held May 7-10 at Shangri-La in Afton, Oklahoma.

Each of the three out-of-state physicians confirmed their participation in the scientific program. James Mathis, MD, East Carolina Medical School, will speak on the suicidal patient. Joseph C. Scott, Jr., MD, University of Nebraska Medical Center, will discuss obstetrical emergencies and Hal Nelson, MD, Fitzsimmons Army Medical Center, Colorado, will talk on reversing drug reactions.

Confirmations for most of the in-state physicians have also been made. Oklahoma doctors and their topics include the following: Petre Grozea, MD, Oklahoma City — "Clinical Crisis in the Cancer Patient"; David Neumann, MD, Oklahoma City — "Upper G.I. Bleeding"; Jerry Bressie, MD, Oklahoma City — "Life Threatening Cardiac Arrhythmias"; Tom Dodson, MD, Tulsa — "The Multiple Trauma Patient"; Jim Wells, MD, Oklahoma City — "The Management of Allergic Emergencies"; John Stuemky, MD, Oklahoma City — "Poisoning in Children"; and Robert Wilder, MD, Oklahoma City — "Emergencies and Emergency Room Technology." □

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Professors to Predict Hospital Costs

Predicting hospital costs in Oklahoma has become the goal of two economics professors at Oklahoma State University.

Ansel M. Sharp, professor and Michael J. Applegate, associate professor, are developing a "Hospital Cost Model" for Oklahoma under an OSU contract with the Oklahoma Health Planning Commission.

The professors had completed three stages of the project as of October. Their first step involved collecting and computer-programming data from 120 non-federal, short-term acute care hospitals. From that information they derived 25 key supply-and-demand variables that influence hospital costs. Later, they developed a regression hospital cost model to predict the impact of the supply-and-demand variables on cost per in-patient day. The third step of the project involved a demonstration of

the model's potential to predict additional costs that will result from proposed changes.

Although the model has been used in several states, Sharp said it is still an experimental project especially in its use for health planners.

"The greatest difficulty in producing a model that can predict accurately lies in the difference in the hospitals," Sharp said.

The professors intend to refine the model to compensate for the variances among hospitals. To accomplish this task, they are including some specific techniques to adjust for the quality and complexity of production in hospitals.

Sharp and Applegate are considering the development of a simultaneous regression model as one technique. This model will adjust hospital costs according to changes in one variable. In addition, the technique will adjust for costs in other variables affected because of the initial changes made in the first variable. For example, if a hospital expands its equipment, the hospital's demand for skilled personnel to operate the new equipment will increase. Additional salary and wage costs become variables also affected from changes in the initial variable. □

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Mark R. Everett, PhD, Honored



A bronze plaque was awarded to the University of Oklahoma Health Sciences Center (OUHSC) in honor of Mark R. Everett, PhD (left). Edwin E. Rice, MD, (center) president of the Oklahoma County Medical Society made the presentation during the October meeting of the College of Medicine faculty on behalf of the OCMS and the Oklahoma State Medical Association. The plaque is now hanging in the Biomedical Sciences Building at the OUHSC.

The county and state medical societies honored Dr Everett for his service to medicine as dean of the College of Medicine at the OUHSC from 1947 to 1964. Thomas N. Lynn Jr., MD, current dean of the College of Medicine is pictured on the right. □

Lab Misreads Tests For Cancer

Misread slides for cancer tests at a Massachusetts laboratory has caused much concern at the federal level.

Oklahoma physicians who have sent PAP smear slides to the ELM Laboratory, Boston, within the last four years are urged to consider rescreening procedures. Also, physicians in the state having any other knowledge of women who have used this laboratory to test for cancer of the cervix are encouraged to inform them of the situation.

The Health Care Financing Administration of the US Department of Health and Human Services and the Massachusetts Department of Public Health discovered improperly screened and misread slides. The basis for concern oc-

curred when the federal Center for Disease Control in Atlanta screened a sample of slides in a joint federal-state survey of the medical laboratory. Findings indicated that the laboratory had misread 10 of the first 12 slides in a group of 400. Repeated inaccuracies in additional slide groups further confirmed the need for action.

Nearly 200,000 women have had cancer tests conducted at the ELM Laboratory since 1976 says a report issued by the Department of Health and Human Services. Some physicians, clinics and patients who have used the laboratory during this time have been contacted about the potential risk involved. However, a complete list of the laboratory's clients has not yet been made available. For this reason, physicians, clinics and other organizations that have sent slides to the laboratory or have any other knowledge of women who have used the laboratory are urged to inform patients-at-risk about the situation.

Although cooperation is needed, the Department of Health and Human Services has also indicated that the situation is not an immediate "life or death" matter since most cervical cancers develop at a slow rate. □

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News Article Elicits OSMA Response

The following is a letter-to-the-editor by OSMA President Floyd F. Miller. Dr Miller wrote the letter in response to an article carried recently in the Oklahoma City Times. The article discussed the growth of emergency care clinics, but was partially based on misconceptions about the length of time normally spent in a physician's waiting room. Doctor Miller responds to these and other misconceptions in the following letter which at press time had not been run by the Oklahoma City paper.

To The Editor:

I am afraid I must take issue with several statements made in an article by Susan Toth which appeared in the Friday, September 26, issue of *The Oklahoma City Times*. The article dealt with the increase in the number of emergency care clinics, but unfortunately also painted a misleading picture about the cost and care which is provided in the more traditional medical setting. I would like to correct some of those misconceptions.

First of all, Ms. Toth describes as being typical a situation in which the patient waits over two hours, sees the doctors for four minutes and runs up a bill of \$35. I am afraid this is far from being typical, and if the reporter had contacted the Oklahoma State Medical Association, we would have told her so. Not only is the wait exaggerated, so is the charge.

For example, according to a Gallup survey conducted in 1978, 41 percent of those questioned waited less than 15 minutes the last time they visited a physician. Sixty-six percent waited less than 30 minutes, and 72 percent waited less than one hour. Only 18 percent of those asked waited more than one hour, and in many cases there are very good explanations for unexpected delays (medical emergencies, unexpected deliveries, etc.). So the "all-too-familiar scenario" is not so familiar after all.

Ms. Toth also says our patients are throwing off their yokes and insisting upon being treated as consumers. This would seem to indicate that they are unsatisfied either with the wait or the type of care they now receive. Surveys, however, show that neither is the case. According

to the same Gallup survey, 74 percent of these same people were either very satisfied or fairly satisfied with the amount of time they spent in the physician's waiting room. According to another Gallup survey conducted in September, 1979, 88 percent of those persons asked indicated they were satisfied with the care they received during the last visit to a physician. I respect the efforts of these emergency clinics to provide quick, efficient, quality medical care, but at the same time it is misleading to infer that the traditional medical setting does otherwise.

As to the difference in cost between an emergency care clinic and a physician's office, I can see little difference. Ms. Toth quotes emergency clinic prices ranging from \$21 for the first office call to \$18-\$26 for subsequent visits (\$26 for weekends). According to an informal survey conducted by the Oklahoma County Medical Society, office calls in Oklahoma City range between \$12.50 and \$20, with most physicians charging fees of approximately \$15. This is far below the \$35 quoted in the scenario, and it is highly unlikely that one injection would increase the charge that much. By the way, the county medical society provided Ms. Toth with this information prior to publication of the September 26 story.

Finally, let me briefly address the infamous Wednesday afternoon physician-golfer. Many physicians start their day by making hospital rounds as early as 7:00 a.m., and they close their office at 5:00 p.m. or later. They also serve time on call during weekends and evenings, and it is also not uncommon to make an evening or middle-of-the-night visit to the hospital to admit a patient or to check on one who is having problems. As a result, many physicians take an afternoon off during the week. You may be interested in knowing, however, that according to a survey conducted in 1978 by the American Medical Association, fewer than 11 percent of those physicians responding indicated they play golf. Projecting that a bit, if 50 percent of the physician-golfers in this state play golf on Wednesday afternoons, there would be approximately 200 physicians on the links and 3,800 back at the office taking care of patients.

Sincerely,

Floyd F. Miller, MD
OSMA President

Death

BERNARD BROCK, MD
1927-1980

Bartlesville anesthesiologist, Bernard Brock, MD, died September 25, 1980. Doctor Brock was a native of Kansas City, Kansas; was graduated from the University of Kansas School of Medicine in 1953; and practiced in Kansas City and Windsor, Missouri before moving to Bartlesville in 1971. □

IN MEMORIAM

1979

<i>John Flack Burton, MD</i>	<i>December 11</i>
<i>David C. Clemans, MD</i>	<i>December 26</i>

1980

<i>Alvin R. Jackson, MD</i>	<i>January 2</i>
<i>Johnny A. Blue, MD</i>	<i>January 31</i>
<i>Merle L. Whitney, MD</i>	<i>February 4</i>
<i>Donald D. Lensgraf, MD</i>	<i>March 3</i>
<i>Charles H. Eads, MD</i>	<i>March 8</i>
<i>Ollie McBride, MD</i>	<i>March 10</i>
<i>Paul C. Gallaher, MD</i>	<i>April 20</i>
<i>Ennis M. Gullatt, MD</i>	<i>April 26</i>
<i>John E. Highland, MD</i>	<i>April 28</i>
<i>H. Violet Sturgeon Minton, MD</i>	<i>April 29</i>
<i>Elton W. LeHew, MD</i>	<i>May 3</i>
<i>C. W. Arrendell, MD</i>	<i>May 6</i>
<i>Edward A. Abernethy, MD</i>	<i>May 9</i>
<i>William F. Thomas, Jr., MD</i>	<i>May 17</i>
<i>Robert C. Lawson, MD</i>	<i>May 17</i>
<i>Robert L. Lembke, MD</i>	<i>June</i>
<i>Joseph Fulcher, MD</i>	<i>July 2</i>
<i>Emmett O. Martin, MD</i>	<i>July 15</i>
<i>James R. Colvert, MD</i>	<i>July 22</i>
<i>Thomas J. Hardman, MD</i>	<i>July 24</i>
<i>Kelly M. West, MD</i>	<i>July 28</i>
<i>Tom S. Gafford, MD</i>	<i>August 4</i>
<i>Joseph J. Swan, MD</i>	<i>August 25</i>
<i>Milton J. Serwer, MD</i>	<i>August 28</i>
<i>Henry B. Jenkins, MD</i>	<i>August 28</i>
<i>I. F. Stephenson, MD</i>	<i>September 7</i>
<i>Emory E. Beechwood, MD</i>	<i>September 9</i>
<i>Paul B. Champlin, MD</i>	<i>September 17</i>
<i>Bernard Brock, MD</i>	<i>September 25</i>

 □

Council to Implement Educational Programs

In order to bring the problem of mobile drug abusers under better control, OSMA's Council on Public and Mental Health intends to implement physician-education programs.

The council determined at the 1980 OSMA annual meeting held in May, that physician-education programs would be the most effective way to battle the problem of mobile drug abusers. The council said the other alternatives discussed were unsatisfactory. These included registry of known drug abusers, stringent prescribing requirements and rehabilitation of drug abusers.

The education programs will be structured to inform physicians about the state's problem with mobile drug abusers. In addition, they will provide detailed information on the various methods drug abusers will use to obtain drugs from physicians. The council also intends to coordinate the programs with other health-related organizations as well as with the Oklahoma State Bureau of Investigation, the Narcotics Bureau and others.

Many drug abusers seek out young physicians who are just establishing practices. For this reason, the council has further recommended that such programs be offered in the state's medical schools.

The council's decision to implement physician-education programs was based upon studies conducted by a task force consisting of three doctors. Chester Bynum, MD, chairman of the council appointed Gordon Deckert, MD, Charles Smith, MD, and Patricia McKnight, MD, to the task force in September, 1979. □

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Book Reviews

Textbook on Physiology and Biochemistry. Ninth Edition. George H. Bell, Donald Emslie-Smith, and Colin R. Paterson. New York, Edinburgh, London: Churchill Livingstone, 1976, 733 pages. Price \$20.00.

This book is unique among the major basic science textbooks in that it contains or combines coverage of two major areas, namely biochemistry and physiology. This is the ninth edition of a book that initially appeared in 1950 and has become, more or less, a standard text in the basic medical sciences. The current edition is in paperback replacing the hard cover. It contains a wealth of information because, although there is a reduction in size from previous editions, the pages are large and set in double columns.

The present edition continues the format of simple but extremely illustrative and excellent line drawings. This contrasts with the caliber of the photographs, reproduction of which is not of very good quality in several instances. Because of the combination coverage of two major disciplines, it is not surprising that both subjects are slighted to some degree. Most of the biochemistry section deals with physiological chemistry and on the physiological side, the coverage of the endocrine and nervous systems is rather superficial. Despite these drawbacks, the book, all in all, is a very useful one. This edition contains two new chapters on immune mechanisms and on hepatic and biliary functions. There is also an appendix providing information on SI units. *Harris D. Riley, Jr., MD*

Principles of Surgery in the First Six Months of Life. By S. Frank Redo. 180 pages, illustrated, Hagerstown, MD.: Harper and Row Publisher, Inc. 1976. Price \$22.50.

This monograph highlights the special and unique problems encountered in surgical disorders of the neonate and the infant during the first six months of life. Dr Alfred Krauss provides an appropriate introductory chapter covering the most common physiologic and pathophysiologic problems in surgical procedures on the newborn.

After a two-and-one-half-page chapter dealing with general principles about surgery in the newborn and the high-risk infant, the book is divided into chapters on an anatomical basis. There are also specific chapters on Hirschsprung disease, pyloric obstruction, abdominal masses, and neoplasmas. A bibliography follows each chapter.

This is a personal account and, thus, there are gaps. Urological problems are treated rather briefly and there is no discussion of cardiovascular problems. Certain pediatric surgeons will disagree with the advice and recommendations given. However, the book will prove useful to general surgeons who are responsible for surgical disorders in the first six months of life. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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